THE USE OF PRE-QUESTIONS IN THE TEACHING OF COMPREHENSION

Thesis

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DISSERTATION ABSTRACT

My dissertation is concerned with the problems of pupils in understanding passages they read. Many readers are able to interpret a passage only at the level of literal recall without relating the passage to their own experience or without seeing the author's intention. This dissertation consequently is concerned with the extent to which pre-questions (about the ideas of the passage) are beneficial in those aspects of reading comprehension. I decided on this because it is generally considered that realisation of context is an aid to fluency and comprehension. (Please see chapters on 'Review of Relevant Literature' and 'What Does It Mean To Understand a Text').

My main hypothesis was that in any test situation those readers (pupils) who had taken the pre-questions would perform better on interpretation questions (questions set on a passage) than those who had not.

Several sets of tests were administered and in several cases the pre-questions proved helpful and in the last set of tests these results were significant.

This led me to conclude that context, comprehension and fluency were linked, that pre-questions could be a help to the teacher both in the reading and study of extracts and also in encouraging and developing reading. Since the tests results indicate a connection between comprehension and context, I would later like to consider pupil motivation and choice of fiction.

H.D.26

This thesis is, except where otherwise stated, my own work. The main part of this thesis was submitted for a higher degree in Spring, 1977, and is herewith modified in the light of the examiners' comments.

Hugh H. Davidson.

H.D.30 STATEMENT AS REGARDS AVAILABILITY

If my thesis is approved for the degree in question, it may be made available at the discretion of the Librarian but may not be photocopied unless prior permission is obtained from myself.

HUGH M. DAVIDSON

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INTRODUCTION

In my dissertation, I want to consider why in some cases a reader makes only a restricted response to a passage of imaginative literature (often simply the recognition and recall of basic information) without any realisation of such things as appreciation and awareness of writer's intention. I have been researching in the hope of finding out why this might be, and more important, if there is any way in which those who tend to read only in this limited way can be helped.

Consequently, to start with, I consider the different levels at which people read imaginative writing such as children's fiction and ponder the problem of why some readers respond to what they have read at different levels (such as showing the ability to recognise humour, irony, metaphor, the ability to recognise intention), whereas others may read only at the literal level.

Whether these levels exist in fact or whether they are different aspects of a single skill needs consideration. It seems clear from the evidence of several researchers that the different aspects of comprehension are united in a single ability which consists of different skills which are equal to each other and which overlap. An individual reader may or may not possess each of these skills.

Commentators have separated out the different skills of comprehension although there are differences of opinion as to what these are. The fact that these skills are overlapping rather than on a gradient is important when we come to the task of answering questions because the task will always be the same. Whether the questions are set before, after or in the middle of a passage, the reader will always bring one total ability with which to respond to the task.

Above all, however, what is essential to any understanding is the recognition of context. Without an individual context any piece of language is meaningless. The importance of context is also connected with the development of perceptual learning.

Perceptual learning is mainly concerned with the ability to make discriminations. We distinguish such features as words, letters and grammar which are static. We must then go further and distinguish the higher-order variables, that is the patterns which appear amidst the individual variations. We use these features which we have perceived to build up possible meanings.

Recognition of an individual context, including the basic background of the reader, and with it the reduction of uncertainty in the reader's mind will influence the kind of further perceptions the reader will make. The use of the pre-questions does not make the reading task specific but does give linguistic items and ideas an importance in the reader's mind. The function of the pre-questions, therefore, is to direct the reader's perceptions and make them aware of what is important in the passage and to provide suggestions (by question) about the surrounding meaning of a passage. In some cases establishing the surrounding meaning involves encouraging readers to draw upon knowledge which they may not have realised they had. The questions draw attention to certain items in the passage and demand an active response. This is why statements or titles are insufficient. The overall aim is that they would come to a passage better prepared to make a more varied response to it. The/-

The pre-questions asked were not designed to elicit information but to help the child think in terms of the passage and to see if this would improve his understanding of the passage. The answers to the pre-questions were not considered relevant. My only concern was to see if I could improve the performance of pupils in answering questions on the passage after it had been read.

The experimental method I used was as follows. I selected two S.1 classes which were of equal ability (in terms of general performance at the primary school); one class was used as the experimental group and one as the control group. The experimental group were given a series of pre-questions, that is, questions to be answered before the passage was read, then to allow this group to read a passage of prose fiction and answer the questions which followed. The control group was given the same passage and the same questions on the passage without any pre-questions.

The scores on the questions on the passage of the two groups were compared. After several tests, I found there was a significant improvement in the mean scores of the experimental group. This led me to believe that help with context would lead to help with understanding and greater variety of response and ultimately I hoped to greater fluency in reading.

THE PROBLEM

The problem that I am concerned with is the limited way in which many children respond to imaginative fiction. Often the response seems to be made only at the level of literal recall without any appreciation of the writer's purpose and without any realisation of the way in which the text is related to their own experience. That is, the reader is doing little more than decoding written symbols. Consequently reading is often performed without any sense of interest, purpose or enjoyment. In these circumstances reading is of comparatively limited value.

The best way of introducing the problem is by referring to the distinction which K. Gardiner[1] makes between 'understanding' and 'comprehension'. By 'understanding' he means being able to recall salient features of a passage that has been read. "Comprehension, on the other hand, is, in modern parlance, 'to get the message'". He continues "In this present discussion, understanding is related to facts and information; comprehension to the impact that a writer makes on the reader. It is the difference between being able to recall the plot of a novel, and being able to extract a personal experience from the interplay of human associations within the story".

Gardiner points out that the distinction between understanding and comprehension may be blurred at times but that there is a real difference and that a great deal of reading requires this kind of comprehension. He/-

[1] K. Gardiner, "Towards Literacy", p.55. Basil Blackwell, 1960.

and to express the cruelty and loneliness to which Scott was exposed. This illustrates very clearly the problem of the child who is trying to express her understanding of the passage.

It also, however, illustrates the problem of making the distinction between understanding and comprehension. It could be argued that here the two areas exist together as part of a single ability. The teacher has to decide which areas need to be developed.

W. S. Gray[1], who considers the same problem, tries to clarify the situation even further by defining different levels of understanding more specifically. He showed that understanding, skills and attitudes common to most reading can be classified under four headings. He attempts to be explicit in his description of the way in which readers respond to what they have read. His description contains the following headings:

1. Word perception, including pronunciation and meaning.
2. Comprehension, which includes 'a clear grasp of what is being read'.
3. Reaction to and evaluation of ideas the author presents.
4. Assimilation of what is read, through fusion of old ideas and information obtained through reading; or, as described by Gray, an 'ability to read the lines, to read between the lines, and to read beyond the lines'.

[1] W. S. Gray, 'The Major Aspects of Reading' in Sequential Development of Reading Abilities, ed. H. M. Robinson, Supplementary Educational Monographs No. 90, pp. 8 - 24, Chicago: University of Chicago Press, 1960.

He argues that in the teaching of literature it is important to encourage children not only to know the plot but also to get underneath the skin of the characters.

To do this he makes several suggestions:

1. That the teacher talk and encourage talk about feelings and ideas related to the passage.
2. That the teacher have the children act out certain crucial situations.
3. That the teacher draw attention to the way words are used to express feelings and emotions which almost defy description.
4. That the teacher encourage the same attitude as in 3. to the children's own writing.

Gardiner quotes an extract taken from the notebook of an eight-year old girl who has been reading about Captain Scott, and who had been asked to record what she had read and her comments.

"I have just read the story of Captain Scott and the South Pole. It was a sad story. They died where the ice was cruel and the world silent". Gardiner points out that here there is a strange mixture of childish understanding and mature comprehension. The mundane opening and the poetic conclusion stand out in sharp contrast. The passage illustrates very clearly the problem of the child who is operating at both levels. In the first sentence she shows understanding of the factual content of the story. In the second sentence she has reached out at a childish level to some form of comprehension in her attempt to classify the story as sad but in the last sentence she has tried to penetrate the full implications of the story and/-

Barrett attempts to define even more closely the different ways in which readers respond. In an unpublished report[1], Barrett argues that teachers make two misconceptions about the instruction of comprehension. These are either considering comprehension as a single unitary skill or assuming that comprehension contains so many skills as to be unmanageable. To provide both a manageable and understandable means of teaching comprehension, Barrett has developed "The Taxonomy of the Cognitive and Affective Dimensions of Reading Comprehension". His taxonomy is divided into five major skill categories or levels. These are: (a) literal comprehension;

(b) re-organisation;

(c) inferential comprehension;

(d) evaluation; and

(e) appreciation.

The five major categories have been arranged to move from the easy to the difficult in terms of the requirements each category appears to demand.

In other words, Barrett assumes that a reader will do as Gardiner suggests, understand first of all a surface level of facts and information and then will appreciate the material at progressively more complex stages. It would perhaps be interesting at this point to develop more fully what is meant by the different labels Barrett gave to his reading skills and here we have some useful attempt to define this.

The following comments are taken from Clymer's article/-

1. Thomas C. Barrett, "Taxonomy of the Cognitive and Affective Dimensions of Reading Comprehension", unpublished.

/article "What is Reading? Some Current Concepts".[1]

Literal Comprehension - This is concerned with ideas and information which are explicitly stated in the passage. A simple task at this level may be the recognition or recall of a single factor or incident. A more complex task might be the recognition or recall of a series of facts or the sequencing of incidents in a reading passage.

Reorganisation - Here the student has to show the ability to reorganise facts, thoughts and ideas explicitly stated in the passage. This can involve categorising people, things, places or giving an outline of the passage, summarising, synthesising (to consolidate explicity ideas or information from more than one source).

Inferential Comprehension - This involves the reader matching material explicitly stated in the passage with his own experience of life and other reading to make hypothesis, conjecture and judgement often independent of the text.

Evaluation - This requires responses by the student which indicate that he has made an evaluative judgement by comparing ideas presented in the extract as compared with external criteria from his own reading, knowledge, comment from his teachers and his peers. This would obviously concern such areas as the distinction between fact and fantasy, the amount of fantasy used, judgements of fact and opinion. For/-

1. T. Clymer, "What is Reading?: some current concepts", in H. M. Robinson (ed.) 'Innovation and Change in Reading Instruction', 67th Yearbook of the National Society for the Study of Education, pp. 7 - 29, Chicago: University of Chicago Press, 1968.

For example, does the author provide adequate support for his opinions? Is he attempting to sway your thinking?

Appreciation - This calls for the student to be emotionally and aesthetically sensitive to the work and to have a reaction to the worth of its psychological and artistic elements. Appreciation includes both the knowledge of, and the emotional response to literary techniques, forms, styles and structures and can be considered under the following headings:-

(a) Emotional response to the content. The reader is asked, encouraged to verbalise his feelings about a reading passage in terms of interest, excitement, boredom, fear, hate and amusement. It is concerned with the emotional impact of the total work on the reader.

(b) Identification with characters or incidents. Teacher's questions of this nature will elicit responses from the reader which demonstrate his sensitivity to, sympathy for, and empathy with characters and happenings portrayed by the a uthor.

(c) Reactions to the author's use of language. In this instance the student is required to respond to the author's craftsmanship in terms of the semantic dimension of the selection, namely connotations and denotations of words.

(d) Imagery. In this instance, the reader is required to verbalise his feelings with regard to the author's ability to visualise, smell, taste, hear, or feel.

Barrett's taxonomy is important because it seems to me that it emphasises the range of work which may be necessary in the teaching of imaginative literature.

It is also important as it emphasises aspects of work such as Appreciation, Evaluation and Identification which many teachers find difficult to deal with. It is for this reason that I have taken this taxonomy into account when preparing questions on a passage and in setting the pre-questions.

Nonetheless I think it important to make certain critical observations about this taxonomy and to say how it compares with other views of comprehension (and here I use the term to include interpretation).

First of all I think Barrett implies that all these categories, at least his main headings, are separate factors in comprehension but this in the light of the findings of other people, is a fairly substantial assumption.

F. B. Davis[1] has investigated the nature of mental skills involved in reading comprehension. Following a study of earlier experimental studies of reading comprehension, he selected eight skills and experimented to establish whether these skills were separate skills or whether they were different manifestations of the same mental factor. These skills were as follows:

1. "recalling word meanings"
2. drawing inferences about the meaning of a word from context.
3. finding answers to questions answered explicitly or in paraphrase.
4. weaving together ideas in context.

5./-

1. F. B. Davis, "Research in Comprehension in Reading" in Reading Research Quarterly 3, pp. 499 - 545, 1968.

5. drawing inferences from the content.

6. recognising a writer's purpose, attitude, tone and mood.

7. identifying a writer's techniques.

8. following the structure of a passage.

From the results of his tests, Davis concluded that reading comprehension is not a unitary, mental skill or operation. He claims in fact that the skills 1, 3, 5, 6 and 8 are experimentally distinguishable.

However, in an address on "Reading as Reasoning" given to a branch of the American Psychological Association in September, 1971, Robert L. Thorndike showed that Davis' data could be analysed and interpreted in a different way. Davis' word knowledge test could be distinguished from the other reading tests but none of the other skills was separately distinguishable.

A similar sort of position was reached by D. Spearritt[1]. Spearritt's factor analysis supported the hypothesis that certain of the skills on Davis' list were identifiable as separate but not skill 3, finding answers to questions answered explicitly or in paraphrase. Apart from 'word knowledge', he found some of the correlations between the other three factors "extraordinarily high". In other words apart from 'word knowledge' the other three factors may represent one basic ability.

1. D. Spearritt, "Identification of subskills of reading comprehension by maximum likelihood factor analysis", pp. 92 - 111, Reading Research Quarterly, Vol. 8, 1972.

On the assumption that each of Barrett's main classifications counts as a mental factor, his list seems to be at odds with the work of both Davis and Spearritt. For example, skill 4 "Weaving together ideas in content" approximates to Barrett's 'reorganisation' yet this was never proved to be a separate factor. Also according to Spearritt, 'literal comprehension' would not be separate from the ability to make an inference. Clearly some of Barrett's categories are not considered to be separate factors by other investigators.

Barrett's statement that the five major categories have been arranged to move from the easy to the difficult would suggest that children progress from literal comprehension then progress through the other categories, coming finally to an awareness of "appreciation". Many teachers would tend to agree with this simply by their observation of pupil progress and partly by guess. At least most pupils find "appreciation" more difficult that "literal comprehension". But part of the problem of appreciation may be one of communication and expression and also of training since Appreciation to some extent depends on knowledge of literary techniques. Also there are occasions where a pupil may be appreciating the writer's intention but have difficulty in dealing with 'literal comprehension' or 'reorganisation'.

If comprehension is indeed a unitary activity then many (or all) of Barrett's distinctions are false. Indeed perhaps all the distinctions are only areas to bear in mind as study skills rather than progressive levels of difficulty.

Indeed if we consider the actual process of answering a question, it is possible to show that no matter the kind of question (whether it is appreciation or recall or general knowledge) the nature of the mental process required is basically the same.

This point is developed in greater detail in the section on pre-questions.

The implications of all this on the teacher might be quite far reaching in relation to the type and amount of questions we use. Many comprehension books and tests tend to assume all the areas Barrett mentions need study or testing whereas in fact only one or two need be important to the particular passage. For example, in my opinion, some pupils often find metaphor difficult to recognise. Some need help to detect writer's tone - for example to detect humour or irony. What seems to be important are the needs, difficulties and interests of the readers and the teacher's judgement about what is important at all stages.

The teacher should be aware in his questioning of all these possible levels of understanding and comprehension and one of his greatest problems is to ask questions that will not only allow the children to express different levels of comprehension but which may also be used to help the child to progress from the first stage of literal comprehension through to the final stage of appreciation and evaluation. Another aspect of this problem is what the teacher will do about the answers he receives. He will receive answers that will illustrate some of these levels of understanding and he must then try to devise means of helping not only the child who can understand only at the factual level but also the child who can only understand at an emotional level and cannot take in the facts. For example, if two children read a passage about the death of Mary, Queen of Scots, they may respond in different ways. One child may recall the incidents leading up to her death and may even recall/-

recall the arguments put forward by the writer as to why she had to die. The second child may not be able to recall any of these details, but will feel a great emotional sympathy with Mary, appreciating her dilemma and even possibly appreciating the dilemma of Elizabeth I.

So far, then, I have been making a distinction between the ability in reading to recall the facts of the passage and the ability to respond in varying depths to the passage. It is this second aim with which I am most concerned and one which I consider important in the teaching of English. I believe that reaching out to meet the author as a person is an essential mark of the mature reader, but the problem is how to develop that maturity in a child so that he is able to see the author as a person, to understand his views and through the written word be able to appreciate his view of life. This is a very complex process in that the child must learn to go through the written symbols to the words and their meaning and then beyond this to perceiving a whole outlook and way of thinking which may be different from his own. He must then be able to assimilate these new ideas and relate them and modify them through his own developing experience.

To appreciate the total impact of the book, the reader can only see events as the writer sees them. As you read about island life in a book like "The Island of Horses"[1] and the writer's attitude to his characters and their outlook on different subjects, you are seeing it from the author's point of view and therefore you are getting to know more about the author.

[1]. Eilis Dillon, "The Island of Horses", Faber, 1956.

On the other hand, one important objective is the ability of the reader to be alive to what he is reading - to read in such a way that he finds himself involved in relating the text to his own experience of life and to his own hopes, fears, expectations and system of values. To be able to achieve these goals, to reach out to meet the author and to be alive to what he is reading, a reader has to be very mature and the teacher must try to develop this maturity in his pupils. There is a great danger that reading may be only taught for one kind of interpretation, the literal one. This may be for several reasons, not all of them bad. It is easier to formulate questions for literal interpretations. The teacher is more sure what answer he is going to expect. It is easier for the child to know what sort of answer he should give and therefore he should feel no worry about interpretation questions. The problem with this kind of literal interpretation is that it tends to make a child think always in a literal kind of way. He is instinctively preparing for a certain kind of question and a question which asks more of him will be unexpected and possibly left unanswered. However, if a pupil's education is to continue, then he must be made aware that finding literal meaning is only one of the many purposes of reading and that reading must be, above all, a thinking process that goes well beyond literal meaning. In other words, in terms of Barrett's taxonomy most work and response is only at the level of literal comprehension.

MY PAPA'S WALTZ

The whiskey on your breath
Could make a small boy dizzy;
But I hung on like death:
Such waltzing was not easy.

We romped until the pans
Slid from the kitchen shelf;
My mother's countenance
Could not unfrown itself.

The hand that held my wrist
Was battered on one knuckle;
At every step you missed
My right ear scraped a buckle.

You beat time on my head
With a palm caked hard by dirt,
Then waltzed me off to bed
Still clinging to your shirt.

Theodore Roethke.

To illustrate the need for the child to do more than merely read a poem for its literal interpretation, I would like to take the poem "My Papa's Waltz" by Theodore Roethke, typed on page 16. Clearly one can make a distinction between the literal meaning of the poem which can be traced simply by reading through the printed poem - the content merely being an expansion of the title - the boy's dance with his father - its pleasures and its discomforts - together with details about the father and the mother. But the poem seems to me to mean more than this. What the poem seems to be suggesting as well as the physical dance is the idea of the importance of origins and relationships. There is, I think, contained within the poem a sense of joy, of exhiliration coupled by a sense of pain. It illustrates the sense of belonging which is important but difficult. It is this kind of further interpretation which I think Gardiner[1.] means by comprehension; what Gray[2.] means by reading between the lines, and what Barrett[3.] refers to as Appreciation. My main contention here is that all too often readers do not move from the level of understanding (in the literal sense) to the level of comprehension. If this is the case, what can the teacher do? Surely somehow the teacher must bring the poem alive. The only way to do this, it seems to me, is to call on the pupil's experience, probably by way of question. In/-

1. Ibid. P.4.

2. Ibid. P.6

3. Ibid. P.7

/In this particular case, the teacher might ask the pupils to talk about their relationships at home with their father, their mother, an uncle. Also he/she might ask them to describe incidents at home which had given them pleasure and yet which had drawbacks to them, or to say which incidents at home had made them feel secure, most secure, least secure. In other words, the teacher must realise that reading can't exist on its own - and here more specifically that a poem can't exist on its own - a poem is only meaningful if the reader relates the poem to his own experience. Hence it seems important that both teacher and pupil read the poem with this in mind. The teacher's aim, as previously stated, is to make the poem come alive and to do this he must try to link the poem to the pupil's experience; the pupil should be taught to recognise the point of contact between the poem and his own experience. Once this contact has been made, it is then possible to ask the question, "What is the poet saying about my own situation?" "Is this situation described as I would expect it to be?" It is at this stage that an appreciation of the language becomes important. Are particular words adding a new light to what is now a familiar situation? This might lead, for example, to a discussion of the word "unfrown", last line in the second stanza. Once the pupil has made contact with the poem and seen how it relates to his own experience, the pupil is then free to speculate on the linguistic situation of "unfrown" and consider, among other things, the possible attitudes of the mother.

Comprehension - the realisation of the writer's aim - can only come if the reader sees some point of contact between himself and the passage. Often, however, this contact is not made and then comprehension becomes impossible, whereas in fact the teacher has a vital part to contribute here.

DANNY FOX MEETS A STRANGER

And at that moment, the wolf appeared, like a dark shape without edges in the mist, his coarse hair, black and grey, standing horribly on end about his neck, stiffly along the ridge of his skinny back like bristles, and drooping shaggily from his tail. His hair stood on end because he was angry. He was angry because he was afraid. He was afraid because the mist made the foxes look larger than they really were. Fear made him remember how all other animals believed that he was too fierce and cruel to feel afraid. All animals thought that. So he was angry at feeling afraid.

Danny Fox looked at his eyes, which glowed red for a moment and changed to glistening black.

Danny Fox stood up growling and advanced step by step towards the wolf, hoping to give his family time to run away. He did not feel afraid. He was always courageous when danger came near and within three seconds his snarling lips and white teeth were only three inches away from the wolf's snarling lips. The wolf was growling too. His white teeth were larger than Danny's, but Danny was not afraid. He thought the wolf's face looked stupid and he knew he was the cleverest of all the animals in the world.

Danny Fox stood still three inches away from the wolf's nose and when he saw that the wolf did not move towards him, he stopped snarling and wagged his tail slightly, pretending to be pleased to meet a stranger. He was clever enough to be polite.

"Good evening, Mr. Wolf", he said politely. "I dare say you are hungry and cold".

The wolf growled fiercely and moved an inch nearer.

"I'm sorry, if what I said offended you, Mr. Wolf", said Danny Fox, quietly stepping back one inch. As he looked at the wolf's large pointed teeth, he was determined to remain three inches away.

"We seldom meet strangers on the mountain path", he said, "You have come a long way and I am sure you must be hungry".

The wolf growled again, a little more fiercely, and again he moved forward an inch.

Danny Fox stopped wagging his tail, and moved back.

"I was just going to take my family down to the beach for supper", he said. "I thought you might like to share our supper".

At last the wolf spoke. "What kind of supper can you get on the beach?" he said crossly. "In the middle of winter on a cold beach!"

Danny Fox could not think of an answer quickly. He was watching the wolf's grey lips, which were curled up nastily showing red gums and gleaming teeth. But Lick, Chew and Swallow came up from behind to help him.

Lick said, "There's a fisherman's house on the beach and the fisherman loves our Daddy".

"No one loves foxes", said the wolf.

"The fisherman's wife gives us fish", said Chew.

"I don't believe that", said the wolf; but as he heard the little foxes talking he became less fierce.

"So does the fisherman sometimes", said Swallow, "but only very small ones. Not big enough for you".

"Swallow, be quiet", said his mother, Mrs. Doxie Fox. "Everything gets in a muddle when you join in".

"Well, they are small, aren't they?" said Swallow. "And very often there's none".

Danny wagged his tail again. He forced himself to wag it, though he did not feel pleased.

"Would you like to come with us and try?" he said to the wolf. He wanted to lead him as far from their den as he could.

"First", said the wolf, "I must find a warm place to spend the night it".

"Haven't you got a den?" said Lick.

"Don't be silly", said Chew. "There wouldn't be a big enough den on the mountain".

"He could just fit into ours", said Swallow. "Don't you think?"

"Be quiet", said his mother, Mrs. Doxie Fox, but Swallow, who was the youngest of her children, could never stop trying to help; and usually he helped the wrong way round.

"Well, he'd take up all the space", said Swallow. "There'd be no room for us. But he could fit in, if he went there by himself".

"Where is your den?" said Mr. Wolf.

"That's a secret", said Chew.

"You'll never find it", said Lick.

"Of course he'll never find it", said Swallow. "Who would ever guess that there's a cosy den behind that prickly hawthorn bush".

"Oh, do be quiet, Swallow", said Mrs. Doxie Fox. But of course it was too late. The wolf stopped snarling and growling.

"I noticed a big hawthorn bush", said Mr. Wolf. "It hung down like a prickly curtain from a crevice in a large grey rock".

"That's right", said Swallow. "That's it".

"Come with us to the beach", said Danny Fox quickly. "The fisherman turns his boat upside down when he's not using it. You can creep underneath and sleep there".

He led the way down the winding mountain path, and looking back occasionally from the corner of his eye, he was surprised and glad to see the wolf loping calmly along behind Mrs. Doxie Fox and the three young foxes. The mist had risen from the ground and as they reached the beach it disappeared, showing a clear evening sky and a full moon that was coming up on the horizon like a circle of white cloud.

DANNY FOX MEETS A STRANGER

D. Thomson (pp. 13 - 17)

A different kind of extract is the one from "Danny Fox Meets a Stranger"[1], but the situation is the same. To realise the full impact of the passage (please see pages 20 - 23), the reader must appreciate that the behaviour of the Wolf and also of Danny Fox is rare. The reader can only appreciate this from knowledge outside of the passage; that normally a hungry wolf would devour the fox's young. Two courses of action are open to the Wolf. He can either attack and devour Danny Fox's young or he can co-operate with the Fox family in their search for food, in this case the fish. Danny Fox skilfully manages to persuade the wolf to choose the latter. Comprehension only comes when the reader relates his knowledge about animals in winter to the content of the passage. It is here that the teacher can intervene to help make this connection in the pupil's mind. In the case of this passage some discussion on the theme of how animals survive in winter or survival in general, or the study of a beach or park in winter either before or after reading the passage would be of considerable help.

Taking Barrett's taxonomy, it might be worthwhile looking at the passage at different levels and asking what the pupil has to do in terms of comprehension. Literal comprehension, I think, has, for the sake of argument, to be assumed. At the level of reorganisation the reader might be expected to tell the story in his own words. The cleverness of Danny Fox and the normal emnity between fox and wolf are points which must be inferred. At/-

1. "Danny Fox Meets a Stranger", D. Thomson (pp. 13 - 17) Puffin Books, 1968.

/At the level of evaluation the reader should be asking questions such as "Could this really happen?" Such a question calls for a judgement by the reader based on his experience. Is the information presented here in keeping with what the pupil has read on the subject in other sources? This would be a judgement of adequacy and validity. In the case of the above extract, discussion with the teacher at these levels could be very profitable. The behaviour of the wolf is rare and the pupil must realise this, but it is not fantasy. In terrible climactic conditions wolf and fox are known to unite for survival purposes. Identification with the plight of the Fox family, with Danny's skill, with his family, together with the overall problem of survival takes place at the level of appreciation and here again the teacher has an important part to play in developing this level of response.

It can be argued that what I am suggesting here as a difficulty is in fact no problem and that children are usually given material appropriate to their maturity, their linguistic ability and their knowledge of the world. If a text is properly selected, suitable for the pupil's age range, there should, in fact, be no difficulty. The text, as it were, on its own, will be sufficiently difficult to take the pupil on to a further stage of maturity and the task is a worthwhile one educationally for the pupil. (We assume the teacher makes a judgement about the pupil's capabilities and development and that he/she presents the pupil with a passage which is neither too difficult nor too easy). Given that the level of difficulty is just right there should be no problem. This/-

/This, however, just does not happen. No matter how well selected a passage or a reading list is, a class of pupils will respond to a text in different ways. If Barrett's taxonomy is applied, some pupils will respond to the passage only at certain levels while others respond at all four levels.

This, in my experience, has happened often enough in the classroom but what is even more perturbing is the high incidence of restricted response in reading in teacher training where the student is quite unable to respond to the passage on the higher levels of Evaluation and Appreciation. This doesn't necessarily mean that the pupil's or the student's knowledge, linguistic or general, is inadequate to the passage but rather that the reader sometimes is unable to relate the printed text to his own experience. Nor can we see the levels of Barrett's taxonomy as absolute. In other words, a student may be responding at a low level but in fact be able to respond more fully. Eliciting this response is one of the teacher's main tasks. Moreover, to suggest that a teacher can select material entirely suitable to a pupil's needs at a particular stage in his development is something I find difficult to accept. Marie Peel[1], writes about a story - "Stories are not something a child grows out of (although he grows out of childish stories) but something that he grows up through. They reveal human life to him in ways he can feel and understand and, according to their quality, develop his power of understanding human life".

In other words, reading is a part of maturing and reading in the classroom is not merely a means of estimating a child's interpretative ability. It/-

[1]. M. Peel, "Seeing to the Heart", p. 56, Chatter and Windus, 1971.

/It must be used to allow him to see life from many different points of view, and through the eyes of many different people. If this is to be done successfully he will need help to understand all the implications of a passage and the reading will have been valuable not only because he has answered questions adequately but because he has learnt more about life in the process".

Again Carroll[1] emphasises this point from a more linguistic point of view. He states "understanding a text may be summarised by stating that comprehension of a message is adequate or satisfactory to the extent that the language receiver apprehends, at least provisionally, whatever linguistic information is present in the message and is able to relate that information to whatever context is available at a given time".

In other words, not only is a child asked to relate a passage to a vision of life; he is also asked to appreciate all the levels at which language has been used. He must understand all the linguistic information and relate it to his own linguistic development but if he is to learn from the passage he may in fact need prompting from the teacher so that he may appreciate that there are new linguistic items which he must assimilate, relate to his own linguistic experience and possibly store away for future use.

Relating reading to one's own experience is not something which stops once the particular text has been put away. It is a continuing process which perhaps never stops. This being the case comprehension is a problem which teachers must be constantly aware of and something which requires their constant assistance.

1. J. B. Carroll, "Defining Language Comprehension: Some Speculations". In J. B. Carroll and R. O. Freedle (eds.) Language Comprehension and the Acquisition of Knowledge, p.15, Washington, D.C.: V. H. Winston, 1972.

REVIEW OF RELEVANT LITERATURE

One of the most pertinent studies relevant to this dissertation is E. B. Huey's book "The Psychology and Pedagogy of Reading".[1] In Chapter 2 of his book Huey studies the movement of the eye in reading by reviewing the work of others and describing his own research in this field and discussing his own findings. In reading a page, he suggests, the eyes do not move continuously from left to right along the line but proceed by a succession of quick short movements to the end and then return in one quick, usually unbroken movement to the left. In the course of traversing the line, the eye pauses (makes fixations), at least two pauses for every line and sometimes more according to the length and the slowness of reading. According to Javal[2], it is only during these pauses that any direct seeing of the words or letters takes place.

To test out the work of the eye in reading and the finding of others, Huey carried out his own experiments and found that his results, on the whole, correlated with those of Erdmann and Dodge[3], except as to rate of movement. They had found out that the number of pauses did not vary greatly from line to line for the same reader and with easy familiar reading matter. For Huey there/-

1. E. B. Huey "The Psychology and Pedagogy of Reading", Macmillan, 1908.

2. E. Javal "Notice Sur les Travaux Scientifiques de Emile Javal", Paris, 1879.

3. B. Erdman and R. Dodge, "Psychologische Untersuchungen über das Lesen, auf Experimenteller Grundlage", Halle, 1898.

/tThere were fewer reading pauses with familiar matter. More pauses were made in reading a foreign language. Proof reading required about three times as many pauses as regular reading. In all Huey's experiments he is dealing with the skilled reader, "the readers read at their usual rate, silently and for thought".

In another set of tests Huey's students were asked to read as fast as possible. Here the number of pauses per line decreased, and also the duration of the pauses. The extent of each eye-movement was correspondingly increased. The speed of the movements was not increased in the least, and there was nothing in any of the experiments to indicate that the rate of movement is subject to direct voluntary control. Huey concludes "Fast readers thus seem to perform less eye work, their movements are less fatiguing in so far as large angled movements may be easier than small ones, and they take less time for visual perception of the printed matter".

In Chapters 3 to 9 of his book Huey[1]. is concerned to explain why it is that the skilled reader is able to read the way he does - as described in Chapter 2. Why, for example, he doesn't read letter for letter or even word for word? Part of Huey's results and others was that there was practically no reading or direct seeing of words and letters except during the pauses. This being the case we are left with the interesting problem as to why we still perceive the line as a line and why we seem to see the letters and words as distinctly during the movements as at the pauses where the visual field is unbroken to consciousness.

1. Ibid. p. 28.

Presumably given that we read the way that Huey suggests, we should in fact see a "blurred grey line" as the eye moves across the page. We don't. Why should this be? Huey argues that this is part of the way that we perceive. Perceiving is largely dependent on selecting and contrasting those sensations which have meaning for us and rejecting those which don't. The blurred grey lines pass unnoticed in favour of clear vision. Later in the book Huey quotes Goldscheider and Muller[1]. - "Goldscheider and Muller were profoundly right when they said that readers perceive in their various ways as their purpose can be best attained".

Huey[2]. himself states "Fusion may occur only when there is an inability to 'think' the data given, in which case the consciousness arises of the data themselves, the black and white sensations". I take 'consciousness' to be the blurred grey line. The situation where an unfamiliar book or newspaper is held far enough away from the eyes will produce this effect.

By now we are well on the way to considering the relationship of the eye and the mind in reading. In reading, the mind and the eye are in conjunction but the mind takes over and becomes more important. Consequently much of what Huey has to say about the skilled reader is to do with perception. And one of the important points about perception is the great amount of patterning involved of both language and information, in the mind of the reader. So Huey notes the case of Cattell/-

1. A. Goldscheider and R. F. Muller, "Zur Phys und Path des Lesen".

2. Ibid. P.28

/Cattell[1.] who found one reader who could read as much as seven words at one exposure when the words composed a sentence and were given in two lines. But more interesting are Huey's[2.] comments on reading a page.

"So it is clear that the larger the amount read during a reading pause, the more inevitably must the reading be by suggestion and inference from clews of whatsoever kind, internal or external. In reading the deficient picture is filled in, retouched by the mind, and the page is thus made to present the familiar appearance of completeness in its details which we suppose to exist in the actual page. The deceptive retinal picture, taken in connection with all the other clews available to consciousness at the moment, means such a page, and we project the meaning outward, just as we fill in mentally the gap in the visual field left by the blind spot".

Huey[3.] then sets out general features of the perceptual process, important in our consideration of what is involved in reading. "Perceiving is an act, a thing we do, always and everywhere, never a mere passive sensing of a group of passing sensations and impressions ..... Certainly on the psychic side there is an active and more or less unitized movement of mind, a sense of inner activity".

1. J. McK. Cattell "Time and Space in Vision", Psychological Review, Vol. VII, pp. 325 - 343, 1900.

2. Ibid (pp. 67 - 68) P.28

3. Ibid (pp. 104 - 105) P.28

And "... Repetition progressively frees the mind from attention to details, makes facile the total act, shortens the time, reduces the extent to which consciousness must concern itself with the process. One may say that the "memory image" helps in the later perception of the word, but it may well be that, as Goldscheider and Muller[1.] put it, "the memory is but an exercise of the apperceptive activity" (Uebung der Apperceptionsthatigkeit) - that we perceive better at the later trial just as we shoot better or skate better with practice.

So the various activities involved in apperceiving a phrase or other word group may become one complex but unitary act, and this act may very simply be set off by this or that cue or set of cues given from the page, and may be done with a minimum of consciousness concerning details".

This leads Huey to a consideration of the dominant parts theory. "Again perception is always a projection or localisation outward of a consciousness which is aroused or suggested by the simulations that have come inward, but which is conditioned strongly from within. We have seen how, when some dominant parts of a word or a sentence were exposed without the other parts, the reader would 'see' them as distinctly as when they are actually there before him".

1. Ibid (pp. 67 - 68) P.30

Huey[1.] continues, "In this view of perception one is inclined to accept what the experiments of Zeitler,[2.] Messmer[3.] and others seem to show, that the first factors of perception in reading are not usually the total form, word length, etc., but certain striking "dominant" parts, the appreciation of total word-form and word-length coming a little later as the recognition is completed at the suggestion of these dominant cues". In other words, we build the meaning round certain key parts of the sentence and then later fill in the meaning from the rest of the sentence. This, however, becomes almost an automatic process, "... but in ordinary reading these would seem to have but a minimum of attention, performing their function automatically and without any apperceptive act that is distinct from that for the larger whole in which their recognition is subsumed".

Huey's[4.] conclusion to this chapter is important: "We are brought back to the conclusion of Goldscheider and Muller that we read by phrases, words or letters as we may serve our purpose best. But we see, too, that the reader's acquirement of ease and power in reading comes through ability to read in larger units.

Meaning, indeed, dominates and unitizes the perceptions of words and phrases, as/-

1. Ibid (p. 109) P.28

2. Julius Zeitler, "Tachistoskopische Versuche Über das Lesen", pp. 380 - 463, Wundt's Philosoph. Studien Bd. XVI H3.

3. Oskar Messmer, "Zur Psychologie dans Lesens bei Kinder und Erwachseinen", pp. 190 - 298.

4. Ibid (p. 116) P.30

/as indeed, according to such writers as Stout[1.] at least, it dominates all perceptions".

To perceive something constantly is to internalise it and these internalisations are used and applied when we read. Huey argues that in speech we think in terms of salient words. In any utterance certain words dominate and are essential to the meaning of an utterance as a whole. In other words, the meaning of the whole dominates and non-salient words are filled round this whole. This concept of speech, presumably connected with the patterns of speech, we internalise. Huey[2.] then claims that in our reading we exploit these patterns - "Our words are thoroughly organised according to the general associative habits of our language, and when any given series has occurred in our reading, the sort of words and the sentence forms that belong in sequence with these are sub-excited in advance of their appearance on the page, and need but slight cues from the page to cause them to spring into the perceptual consciousness".

The mind, in other words, is doing the patterning and searching for the completion of meaning; the general meaning, in fact, often dawns upon the reader prior to the full sentence - utterance.

In Chapter 6, The Interpretation of What is Read and the Nature of Meaning, Huey emphasises it is knowledge of context, the total situation which carries the meaning and not the words in themselves; or, to put it another way, sentences, words, sounds can appear complete gibberish unless the reader or the listener has a context.

1. G. F. Stout, "Analytical Psychology", Vols. 1-2, London, The Macmillan Company, 1896.

2. Ibid (p. 143) P.28

Connected with this idea of context is Huey's point that we use words to think with and not images. The imagery of words is more a concept-whole, part of a phase of an individual's life. "Nearly all words are concept-wholes which are representative of so many particulars. Even single names are somewhat so, standing for a whole that represents varying phases in the history of the individual".[1]

As you read, you understand the context, you don't define it. Your understanding is abstract and only becomes concrete if for some reason you have to stop. So if the headline "Umtali Bishop May Face Guerilla Charges" is read with understanding, there will be no attempt made to define any of the terms or to 'image' any of the words. You simply understand them in an abstract way. In the sentence, "I'm going to sit in that chair", the situation will direct the reader to the meaning of the word 'sit' and 'chair' and if you can grasp the commonly accepted meaning of these words or the meaning of the author, you can understand what he is trying to say. You do this by conceptualising, by linking the words to something in the brain you can understand, rather than imagining a person in a particular chair.

According to Huey then, the skilled reader might find no difficulty with the two sentences:
"The boy came in and sat in a chair waiting for a doctor to appear".
"The boy came in and sat in the teacher's chair".
but it might be necessary to direct a reader to think about chairs in more detail in the second example and to think about chairs in general - in other words to think about the image of the word.

Therefore/-

1. Ibid (p. 161) P.28

Therefore a lot of what we read we don't need to think about but obviously there are cases where we do. It may be that this is one of the reasons why a writer like Enid Blyton is criticised in that there is very little specific thinking involved. Once you've grasped the basic idea, the writing is so simple that it can be read through on a surface level without ever needing to specify your thinking. There is never any implication in anything, everything exists at the same level - the nice girl on the nice horse. The reverse of this is poetry which is an artificial way of attracting attention, where the writer is stimulating you to see things in a new way and to make new connections. Perhaps this is one of the reasons why poetry is or can be so tiring to read. Often we read without effort, we don't read each letter, each word; we know what to expect. The context, the familiarity takes you on, we take in concepts (including grammatical ones) which are familiar and easy without usually perceiving images. But even where the image seems to be present, Huey[1] argues that the context still has the last word. "However, when a detail, say a sense image, does form part of our thought of a word that is read or heard, it may, although irrelevant or unessential, help the word to hold attention on the real meaning, which, however, is not the image". So in the sentence -

"Anne moved down to the beach, her fish-like tail dragging along the rocks" - when the skilled reader comes to her "fish-like tail", he is probably going to form an image in his mind which will allow him to grasp the idea of Anne as a mermaid. By forming an image, the/-

[1] Ibid (p. 162) P.28

/the skilled reader can go just beyond his actual ability and learn something new but even here Huey[1] argues context is important -

"But as Stout[2] rightly argues, the meaning even here is not mainly in the image, but is in the feeling which attaches to the image and the word together as the feeling's sign. Often, as has been noted in the account of my experiments, we get this meaning feeling without the word or the image, often it is all we possibly can get, in those tantalising cases of remembering only what a name is like, how it feels to say it, what its deeper significance is".

Huey himself also emphasises the point that meaning is the most important factor to be taken into account.

"Often in our reading we are content, for considerable stretches, with this sense-meaning feeling, like children who listen with rapt attention to half-understood things, asking the meaning of none. Their thinking is in form just what ours is when it is rapid. Both of us make flying leaps over large portions of the sentence uttered, and we give attention only to substantive starting points, turning points, and conclusions here and there". And "of specific meanings beyond this general feeling of 'making sense', everything in my own experiments indicates that they are usually total meanings belonging to sentences or unitary parts of sentences but felt differently as this or that particular word is being dealt with; or we can say that the particular word's meaning is felt in a perspective of the total meaning".

1. Ibid (pp. 165 - 166) P.28

2. Ibid P.34

Huey then goes on to discuss the pedagogical applications of his theory and basically his main plea is for continuity and wholeness. Reading is an act of perception and the more we do the easier it becomes. This being the case Huey argues for the need in teachers and ultimately their pupils for a wide background of knowledge based on the cultural background of the Anglo-Saxon race which would be similar to the German "Das Deutsches Lesebuch" - a kind of ethnic Bible, a vast store of folk literature rigorously edited and presented with sketches of life of each writer quoted. These recommendations will be studied in more detail at the end of the dissertation.

From Huey's[1.] thirteen conclusions which he makes towards the end of the book, I quote four which are particularly relevant:

1. The home is the natural place for learning to read, in connection with the child's introduction to literature through story-telling, picture-reading. The child will make much use of reading and writing in his plays, using both pictures and words. The picture writing of primitive peoples has a wealth of suggestion for such practice. His example of the Petition of Chippeway Indians forcibly indicates this.
2. The school should cease to make primary reading the fetish that it long has been, and should construct a primary course in which reading and writing will be learned secondarily, and only as they serve a purpose felt as such by the pupil, the reading always being for meaning.

3./-

1. Ibid (pp. 379 - 383) P.28

3. The child should never be permitted to read for the sake of reading, as a formal process or as an end in itself. The reading should always be for the intrinsic interest or value of what is read, reading never being done or thought of as an "exercise". Word-pronouncing will therefore always be secondary to getting whole sentence-meanings and this from the very first.

4. Extract from Item 7 "School-readers, especially primers, should largely disappear, except as they may be competent editings of the real literature or the mother tongue, presented in literary wholes, or as they may be books needed for information needed in everyday life of the school".

The importance of perception is also discussed in Gibson and Levin's book "The Psychology of Reading".[1] (Chapter 2 'A theory of Perceptual Learning).

In contrast to the idea of content and related experience, they emphasise that an increase of specificity of discrimination to a stimulus input is an extraction, a "pulling out" rather than an adding on.

The modification is in <u>what</u> is perceived.

Perceptual learning and its development can be characterised in four important ways. Firstly, it is adaptive to the needs of a person. We learn to differentiate things that are edible and things that are not. Later we learn to differentiate telephone numbers and to differentiate names. Also it is active. We/-

[1]. E. Gibson and H. Levin, "The Psychology of Reading", P. 14. M.I.T., 1976.

We use our receptor systems to search for useful information. Part of the basis of perceptual learning is an improvement in economical patterns of search behaviour such as increased skill in scanning for wanted information in reading something like a newspaper. Also perceptual learning is selective. Not all the potential information in stimulation is effective. We learn to extract what has utility for reducing uncertainty in our way of life. Lastly it involves progress to better and better differentiation.

What is learned in perceptual learning can be discussed under three headings. These are (i) distinctive features; (ii) invariants of events, and (iii) higher-order variables.

Distinctive features are relational and not absolute like building blocks or elements. They are contrastive as sharp or blunt, or straight or curved are contrastive. Gibson and Levin use the phoneme as an example to show that distinctive features must be invariant. Jakobson[1.] argues that the significant differences in the sound system of any language are few and invariant. Yet most children learn to pick out these differences in a language and realise they are unchanging.

What is learned includes not only distinctive features of things that are static, but also invariant relations over time. Thus when a mother looms over a child and then moves away, the child, despite the variation in the size of face (according to movement) can pick out certain constants about the face itself. Gibson/-

1. R. Jakobson & M. Halle "Fundamentals of Language", The Hague, Mouton, 1956.

Gibson and Levin argue that meaning is rooted in perceptual learning provided by these experiences. They admit that there is a long road from perception of meaning of an ongoing event to perception of words printed on a page that one is reading but that the beginning is there, since the invariant properties of speech and writing are themselves learned through observation of events, or by performance.

Under the heading Higher-order variables the writers discuss variables which are basically the same but are repeated in a particular way. In the example of seeing a man walking the invariable are the steps; the variable is that he gets closer to you. You recognise two things at once. So with a tune there are variations on a melody but a basic pattern is still there. This has important applications in learning. In a process of any kind walking, listening to music, using language you do not have to learn each individual item in the process. What you learn is the pattern and the ability to recognise the pattern and then to slot further learning into these patterns. You do not learn every individual sentence in a language. You learn a set of patterns and then you fit your sentences and other people's sentences into these patterns so that you understand people through them.

Linked to the theme of perception is the development of strategies in solving a verbal problem. Gibson and Levin give an example of an experiment by Boykin[1] where children were asked to make words from scrambled letters. Gibson/-

[1] A. W. Boykin, "Verbally Expressed Preference and Complexity Judgements as they relate to levels of performance in a problem solving situation", Unpublished doctoral dissertation, University of Michigan, 1972.

Gibson and Levin argue that an adult does not simply manually or mentally manipulate the letters by trial and error. What they do is to make use of their knowledge of sequential probabilities and especially of constrained clusters and they frequently 'sound out' combinations. In Boykin's experiment, the selection by subjects of high-probability vowel and consonant clusters led to the greatest number of the correct responses. Gibson and Levin take the hypothetical example of the word "prawn". They point out that a sophisticated subject knows that WN is a common final consonant cluster but impossible as an initial one, that PR never ends an English word and that A is a common medial vowel. This knowledge is internalised even though seldom verbalised, and the word, seemingly automatically, pops out.

Gibson and Levin also raise an interesting question in this connection. They ask (in connection with "prawn") - "Is it an animal word they were asked to find?" For an adult, words have lexical features like class membership, and he/she knows at once that this is the word that he wants. The long process of becoming literate involves problem-solving strategies at various levels that do not come all at once.

Connected with this is the notion of transfer. Gibson and Levin define knowledge as being relational and only in that sense transferable.

By 'relational' we mean that once a distinctive feature is learned, the same principle seen in that feature can be applied to another situation. So distinctive features of grammar, lexis, orthography once grasped can be used to solve future problems.

That is, the child relates what he has learned in one situation to what he wants to learn in another.

Thus orthographic rules are relational and can be transferred to the reading of hitherto unseen words or pseudo-words. All kinds of principles, order and concepts are relational and this is all relevant to reading.

While Gibson and Levin admit to the difficulty of knowing what the discrimination process involves in the mind of the child, nevertheless they suggest problem solving strategies can be fostered by giving help at the right time. For example, should the children have been given the additional information that they were looking for an animal when attempting to form the word 'prawn'? Clearly the problem is to know when the time is right but if children learn to discriminate at different levels by perception then it follows that they could be given some help to think in terms of these discriminations before they come to a particular linguistic conceptual problem.

The difficulty would be, as Gibson and Levin point out, that of knowing what the child is actually perceiving. Yet again the possibility emerges that some kind of intervention might be helpful. You might tell them to look for an animal. For example, how helpful is the concept of 'animal' to a child as say opposed to an adult, or again, if the adult is told 'animal', would he reject "prawn"?

This discussion of Perception is linked to some of the issues raised in P. D'Arcy "The Readers Response".[1] The/-

1. P. D'Arcy, "Reading for Meaning", Vol. 2, The Reader's Response, Hutchison, 1973.

The kind of activity and goal expected by the teacher will depend to a certain extent on the view of interpretation-comprehension which the teacher holds.

D'Arcy maintains "In testing or eliciting a reader's response to a passage set for 'comprehension' the tone, intention and feeling in the writing must be taken into account as well as the sense". If, however, the teacher is an advocate of the 'separate skills' view (discussed in previous chapter, The Problem), the student is much more likely to be required to focus on single words or phrases. Teachers, on the other hand, who have chosen to work with this second unitary idea of interpretation have suggested that an oral approach in which teacher and class can discuss the meaning of a piece of writing provides a valuable introduction to sustained writing which focuses on 'key' questions. On the basis of this experience they have further suggested that in a written test the student be invited to consider some 'lead' questions without having to write down anything about them, before attempting to formulate explicit answers to 'central' questions.

What is also interesting is D'Arcy's conclusions on the results of an experiment conducted by London teachers on the teaching of comprehension. The experiment was to investigate the effect of 'training' by formal comprehension lessons on the written response of secondary twelve-to-thirteen-year-old pupils to what they read. They found that there had been no effect on grammar school pupils and a difference in favour of the "trained group" that was just significant in secondary modern schools. They concluded that regular reading (without comprehension)exercises of any kind would/-

/would have produced the same improvement over a period of months. They also noticed that correlations between knowledge of vocabulary (multiple-choice questions) and open ended questions was not high, which they thought suggested "vocabulary may not be all-important at higher levels of reading".

The Open University publication "Literature for Children" compiled by Alan Davies[1]. is concerned with the problem of encouraging the children to read and one of the first questions asked is "What is children's literature"? and "What literature will children read instinctively, without guidance"? If children, for example, are reading comic strips and material which the teacher considers sub-cultural, what should the teacher do about it? Do you draw the children away from this and get them to read something better? What then are the advantages of trying to bring children to material which is more mature than they themselves are? The problem is also raised as to how the teacher would guide his or her pupils through such a book. To what extent does the teacher draw on what they know already and to what extent introduce them to new ideas?

Another point raised is the question of whether children want to learn about ordinary children like themselves or do they want to read something in the realms of fantasy? In an analysis of different books a general observation emerges which is that, whatever the children read, the best and the most popular writers are those which make the characters real, that is characters facing real problems and real situations. The/-

[1]. Alan Davies, "Literature for Children", The Open Unive rsity, 1973.

The realism may not necessarily be concerned with the truth of basic facts but rather that the reader is able to contextualise emotionally if not, for example, historically.

Reading was also considered to be something of a social problem in that reading is a middle-class activity. The working class don't read. If, as is likely, this is the case, it seems we are back to the notion of context in reading and that the teacher's purpose is to make those with a limited context more aware of wider and more numerous contexts.

Huey[1]. in Chapter One of his book has pointed out that "Reading itself, as a psycho-physiological process, is almost as good as a miracle". "And yet this habit to which we subject ourselves and our children for so considerable a part of the time is an unnatural one, intensely artificial in many respects. The human eye and the human mind, the most delicate products of evolution, were evolved in conditions quite other than those of reading".

Having said this, however, Huey argues that the skilled reader reads with ease and that reading can become almost a natural process. However, part of the difficulty of comprehension may arise from this case. If we read constantly with fluency, the very fluency which takes us through the passage may not be at one with correct interpretation. In other words we may read fluently but may not in fact be interpreting the passage correctly. Given that we stress certain words in the sentence and fit the meaning round these words, it is conceivable that we can put the emphasis round the wrong words. This/-

1. Ibid P.28

This is the view of Thorndike in "Reading and Reasoning".[1] "To make a long story short, inspection of the mistakes shows that the potency of any group or word group in a question may be far above or far below its proper word or word group in the paragraph. Understanding a paragraph implies keeping these respective weights in proper proportion until they together evoke a response which satisfies the purpose of reading.

Understanding a paragraph is like solving a problem in mathematics. It consists of selecting the right elements of the situation and putting them together in the right relations, and also with the right amount of weight or influence or force for each. The mind is assailed by every word in the paragraph. It must select, repress, soften, emphasize, correlate and organise, all under the right mental set or purpose or demand".

The idea of reading as reasoning isn't developed to any great extent in Huey's work. It is probably the case that Huey assumes that in fluent reading correct reasoning has taken place but this isn't made clear. Huey's model of reading is open to the objection that he doesn't appear to consider the possibility that the understanding can be at fault and also there is no attempt to separate out literacy from comprehension.

In "Reading and Writing" by A. Davies and Widdowson[2] the writers make such a distinction. They point out that in any/-

1. Edward L. Thorndike, "Reading as Reasoning", Journal of Educational Psychology, 1917.

2. Alan Davies and H. G. Widdowson, 'Reading and Writing' in the "Edinburgh Course in Applied Linguistics", Vol. 3, ed. S. P. Corder and J. P. B. Allen, O.U.P., 1973.

/any educational situation there are three factors, the student, the teacher and the materials. In such a situation, because learning is taking place, there is a fourth factor, the factor of time. For reading these four factors can be arranged in the following figure.

	STUDENT	TEACHING	MATERIALS
4. TIME	A RECOGNITION	INITIAL	LITERACY
	B STRUCTURING	INTERMEDIATE	COMPREHENSION (a)
	C INTERPRETATION	ADVANCED	COMPREHENSION (b)

The student must first recognise the written language. He must be able to decode the symbols and to structure them into words and sentences. From this stage he then must go on to interpret the structures at the deepest level of comprehension. It is obvious that the three stages will overlap and even a skilled reader will hesitate at an earlier stage when he meets unfamiliar material. To read quickly and fluently and to comprehend at the same time is possibly only among advanced readers. Lack of comprehension holds the reader back at the intermediate stage of structuring. To achieve the aims of literacy and comprehension the material has to be familiar or fairly familiar. Very few people can read unfamiliar material with any degree of fluency.

An important problem in the teaching of reading is that we don't know how a pupil learns. Most pupils learn to read and understand and we can study the end product but methods of teaching are so various/-

/various and successful that it is difficult to follow through the reading process with any degree of certainty.

In this chapter consideration is given to testing, whether people have understood the passage, the sort of questions which are asked which we think will prove whether a pupil has understood a passage and methods of simplifying passages as to whether they may be more easily understood.

In an article, "What is reading? Some current concepts", Theodore Clymer[1]. emphasizes the part played by thinking in reading and discusses amongst others the work of Barrett and Gray.

Reading comprehension, as treated in Barrett's taxonomy (Taxonomy of the Cognitive and Affective Dimensions of Reading Comprehension) divides reading comprehension into five major skills, categories or levels:

(a) literal comprehension; (b) re-organisation;
(c) inferential comprehension; (d) evaluation; and
(e) appreciation.

These categories have already been elaborated on in another part of the dissertation.

Gray stated that most reading activities can be classified under four headings. These are:-

1. Word perception, including pronunciation and meaning.
2. Comprehension, which includes a clear grasp of what is read.
3. Reaction to and evaluation of ideas the author presents.
4. Assimilation of what is read through fusion of old ideas and information obtained through reading.

1. Ibid . P.8

While each of these aspects is discussed separately, Gray makes it abundantly clear that these aspects operate simultaneously and that reading must be considered a 'unitary act'. This, in a sense, takes us back to Huey, that is, the skilled reader reacts to all levels simultaneously. The reading of propaganda would be a case in point here where the skilled reader would react both emotionally and critically. Failure to act critically would be a failure in reading according to Gray and presumably according to Huey - though he never makes this clear.

It also follows from the work of Barrett, Gray and others that we can read for different purposes and that the way in which we read will be dictated by our purpose. It also follows from this that the teacher can help the pupil in his reading by emphasising the purpose of the activity, through the kind of questions he asks about a reading passage.

The knowledge, however, that we read for different purposes isn't in itself enough to solve the problem of teaching people to read - in the fullest sense of the word. Huey tried to show what went on in the mind of the skilled reader; Gibson and Levin in "The Psychology of Reading"[1]. continue on the same lines. While in the section "Learning from Reading" they admit that further studies of the mature reader are necessary, nonetheless Gibson and Levin are concerned with the factors in a text which enable learning to take place. These can be grammatical, awareness of semantic groupings and inference from statements given in the text. They/-

[1]. Ibid P.39

They emphasise the adaptive nature of reading and the importance of adapting reading style and speed to the nature of the text, to its relative difficulty of content and style and to reader's purpose.

Another major principle which they claim to be important is the trend towards increasing economy in the adult reader. This is broken down into two important sub-principles. One is that the reader will direct his attention to processing textual material in the most important way that he can. This achievement is accomplished in four ways:

(a) By selecting relevant information;

(b) By ignoring irrelevant information;

(c) By processing the largest units that are appropriate to the task;

(d) By processing the least amount of information available to the task.

The second sub-principle states that adaptive reading is characterised by continual reduction of information. This reduction is characterised in three ways:

(a) Processing is reduced in proportion to the number of alternatives that could succeed. A mass of information is reduced to a minimum number of alternatives;

(b) Alternatives are reduced by the application of rules and constraints which are structural variables in a text;

(c) Alternatives are reduced by using old information, both conceptual and inferred from co-occurrence requirements in a text to comprehend new information.

"Finally we conclude that the reading process is rule governed and incapable of adequate descriptions in simple terms".

As a final note to this it would be worthwhile pondering a quotation from Bruner[1]:

"The teaching and learning of structure rather than simply the mastery of facts and techniques, is at the centre of the classic problem of transfer".

This looks back to Huey, how by structuring we become fluent readers, to G. Gibson and Levin in that we can only select and learn from a passage by being able to assimilate the structure of a passage itself and thereby selecting the appropriate material from a passage and then links forward to my own work in that I hope to show that children can be helped both to recognise the structure of a passage and place that passage in a pattern of their previous knowledge.

1. Bruner, Jerome S., "The Process of Education", New York, Vintage Books, 12, 21 (1960)

WHAT DOES IT MEAN TO UNDERSTAND A TEXT?

According to Carroll - "Defining Language Comprehension: Some Speculations"[1] - understanding a text may be summarised by stating that comprehension of a message is adequate or satisfactory to the extent that the language receiver apprehends, at least provisionally, whatever linguistic information is present in the message and is able to relate that information to whatever context is available at a given time. "Understanding a text is seen as a process that has two stages:

(a) where linguistic information is understood, and

(b) where that information is related to a wider context of knowledge within the reader's experience.

It is important to try to define here linguistic information. This I take to be the deep and surface structure of a word or group of words. Thus the word 'man' in the sentence "The man sees the boy" has grammatical meaning in so much that it has a role within the structure of language, here a noun and a s a noun in this sentence. But this grammatical meaning must be combined with the semantic interpretation of the word, that is the ability to see what semantic group the word refers to, whether animate or inanimate, human or inhuman. So linguistic meaning must come from a realisation of both these structures.

"Wider context within the reader's experience" needs some explanation. It is now generally agreed that all the knowledge we possess is patterned in the mind in such a way that we can draw on knowledge we acquired ten or fifty years ago merely by referring back to a particular field of information. So/-

[1] Ibid P.27

So at the mention of the word "gun", the mind might revolve back to war or sportsmanship or games of Cowboys and Indians. The word might then have several associations in the mind. As more information is obtained from the context it is possible to "home in" on a more accurate idea of the kind of gun referred to.

Smith, in "Understanding Reading"[1] argues that ..... we do not perceive anything unless we can allocate it to one of our cognitive categories. By this I understand Smith to mean that we assimilate information into our brains in such a way that we have it patterned into sections and groups of ideas. We do not take information in pell-mell but add to information already there, in a systematic way so that we call upon information whenever we require it. We use our information in fact rather in the way we use grammar. If we need to use it we recall it according to need but it may lie fallow for many years if the occasion for using it does not arise. In the same way there are many grammatical sentences which we are never called upon to make, but, in fact, are quite capable of making should the need arise. When we ask a pupil to understand a passage we are asking him to look back into all the information he has assimilated over the years and to interpret the passage in terms of that information.

Various ways of testing have been devised to ascertain whether understanding has taken place. The most common kind of question is one which asks for a paraphrase of the text in the answer. What/-

1. Frank Smith, "Understanding Reading", p. 77, Holt, Rinehart and Winston Inc., 1971.

/What appears to me to be most essential as evidence of understanding is Paraphrase, since this gives the reader the opportunity to say in his own words what the passage is about. By paraphrase I mean the ability of the reader to translate a statement made by one person into words of his own without any loss of initial meaning or implication of statement. This may be either internal or external. So long as the reader has understood the idea of 'dog' for example, it doesn't mean he has to translate the word in an unnatural way.

One of the problems of research when you consider paraphrase is how to evaluate an answer. If a person is given a phrase, however simple, to paraphrase, obviously the answer will be a subjective one. It may be that the assessor has also worked out a subjective paraphrase which may differ quite considerably from that of the person he is testing. To get round this problem it is possible in many instances to devise multiple choice questions in which three or four alternative paraphrases are offered to the student with only one of them being a paraphrase acceptable to most people. This method is probably the nearest we can come to eliminating the subjectivity of answers although even here the mind of the tester is apparent in the choice of alternatives. The problem of the distance between understanding and expressing that understanding is obvious with weaker candidates but even with intelligent candidates. Though the picture in their minds may be identical, we have no means of appreciating this except through their words and their mode of expression. These/-

These may be so different from each other that it might appear that they have not understood when they have. Multiple choice questions are again probably the best answer to this problem.

This problem can be illustrated in the following way. Here is a question taken from a fairly typical English Interpretation paper. "Mild and remote as the benediction of some antique priest". (A description of the moon).

(1) Briefly describe the priest as you see him in your mind's eye when you read these words. Begin your description with the words "I see ..... ".

(2) What is it about the moon that suggests this comparison?

The first question clearly demands an initial paraphrase of the statement and the second question then asks for a deduction to be made from the first answer. However, although we may expect a fairly general interpretation of the above statement, in fact there are many possible variations and they depend very much on personal experience and personal attitudes. The result is that answers to these questions will vary considerably according to the picture in the individual's mind. This in itself is not so serious if leeway is allowed in the marking but when we come to the second question which is dependent on the first question there is a danger of the answers becoming so diverse as to become pointless. Even in a much tighter question like -

"The colour of smoked herring". This suggests that the old man was:

A. Old? B. Tough? C. Brown? D. Weather-beaten?

This question is used in my own experiment. Please see page 87 of this thesis.

Where/-

Where a multiple choice has been offered, the problem remains a subjective one. The answers still depend on the individual's picture of smoked herring. The answer which was expected was D but it is possible to think of smoked herring in terms of their colour or to think of them as something which can withstand time, i.e. tough. Nonetheless in multiple choices the questioner must take into account what the writer's intention is in any particular case and must count as wrong any other interpretations, however valid they may be outside the situation of the particular passage.

The only way of overcoming this problem absolutely is to make the alternatives so clearly wrong that only those who have no idea of what the passage means could make a mistake in their choice. In this case, however, the test again is in danger of becoming meaningless.

Paraphrase, however, is the most important factor in the testing of meaning but it must always be paraphrase in terms of context. This would involve the reader's ability to paraphrase the ideas of a passage and to be able to relate them to a whole context, his whole context of knowledge. This is the ability of the language user to process any particular sentence in order to assimilate it to his prior knowledge. The reader has to fit the linguistic information into a whole pattern of knowledge.

This is not always possible when the contextual information is insufficient to tell us exactly which part of our wider knowledge to call upon. Thus the sentence "The shepherd picked up a pen" can't be given a single paraphrase as it stands. Any attempt at translation here would involve a fair amount of guessing since 'pen' has two possible interpretations. On/-

/On the other hand "the boy hit the dog" is fairly easily translateable. There is very little ambiguity of meaning. Paraphrase here is only concerned with the words in themselves. No wider context is available and no wider implications have to be taken into account. Implications of bravery, cowardice, don't come into the situation. The only possible translation is a literal one, that a young male member of the human species has struck a canine animal. The position is different with the sentence: '"You're a fine one", said the man, seeing the big boy hit the tiny dog'". Here more information is available. There are indications of implications of what has happened. Both the contrast of the adjectives 'big' and 'tiny' could suggest to the fair-minded British citizens that unfair practice has taken place and the structure of "You're a fine one" suggests a contemptuous or sarcastic attitude to the boy. Both these further implications come from the structure of the sentence but also from the greater knowledge in that we know and accept that big people aren't supposed to hit little things and since we've heard that expression used sarcastically we accept it as sarcastic.

We must also accept, however, that once wider context has been taken into account the initial point of view of the reader and the teacher may in fact be very different so that when we consider wider contexts we are very often taking into account a whole set of social and moral values. For example in a passage dealing with the police in which there is an element of justice being meted out, it can come as a shock to the teacher to realise that the pupils' attitude to the situation is quite different from his own. To start with the pupil may see no relationship between the police and justice. Secondly he may see justice purely in the form of punishment. Thirdly/-

Thirdly he may see the police as an enemy force rather than a helper. With these thoughts in mind he will come to the passage with a set of concepts and beliefs which may make it impossible for him to 'understand' the passage in the same way as the teacher does. Alternatively a young teacher whose idea of the police and justice comes mostly from television and a middle-class idea of the policeman may find himself absolutely incapable of interpreting his pupils' answers to questions on a given passage. There are many cases where a young teacher especially is surprised by the different values of the community in which he teaches.

There are obviously examples of contexts which have nearly vanished from modern pupils' backgrounds but these are not so difficult to deal with since both teacher and pupil are starting from the same point of ignorance. Thus novels about racial problems in South Africa are probably less complicated to deal with since the teacher and pupil are both isolated from the real situation and must study and learn about the context together. A novel about a mixed racial community in this country may present more subtle problems since the pupil in his home environment may be at the centre of the problem, the prejudices and conflicts where the teacher may be an outsider observing externally with hopeful idealism. Even in a novelist as clear cut as Jane Austen we'll find some pupils who understand the world she describes and can laugh at it because their own parents understand that world, whereas we find other pupils who have no conception of such a world of leisure or of such social values and come nowhere near, therefore, to appreciating the humour of the books. In/-

In this instance it is obviously essential that we give the pupil as much background as possible so that he can appreciate the problems which Jane Austen depicts, which may be so different from their own. In every instance of literature it is important that the child is given as much background as possible but it is also very important that he should learn to realise that there are many different ways of looking at even the simplest human issue so that though he may not know much of the world of Jane Austen, he can appreciate that she is looking (among other things) at marriage even though her concept of marriage may have no relationship with his own.

The pupil then must be encouraged to think about issues in as broad a way as possible without forcing on him our own views. Nonetheless when the pupil comes to reading a particular passage we would expect the pupil to realise both from the immediate situation, the passage itself, and from the linguistic directives what the writer's attitude towards the subject was in a specific case. Thus in the sentence - "I began to like New York", we have to take into account all that the writer has said previously about New York, but most important we must pay attention to the word 'began'. Here both the tense of the verb and its semantic content give us the answer to the question set in the 'O' Grade Paper, 1975 - What are we meant to infer from this sentence?

The idea of meaning being the processing of linguistic information into a whole pattern of knowledge built up over the years is connected with Smith's[1] view that the extraction of meaning from a text is the reduction of uncertainty. So/-

[1] Ibid p. 52.

So with the word 'boy' - the extraction of meaning is a reduction process. On the basis of previous knowledge, you decide first that 'boy' refers to a human being, then you eliminate man on an age basis, eliminate woman and girl on a sex basis and therefore decide that this is a young male of the human race. Smith[1.] writes 'that the identification (of a letter or a word) does far more than pin a label on the stimulus event; the identification locates the event in the entire structure of knowledge of the perceiver". To show this, he provides a grid, indicating the way we pattern our knowledge and use these patterns in the elimination of uncertainty. In the sentence already referred to, "The shepherd picked up his pen", assuming prior knowledge of the word 'shepherd', you eliminate all uncertainties about the word, that is you eliminate all other jobs, all other types of people until the uncertainty has been reduced and you perceive what a shepherd is. In the same sentence the word "pen" is more of a problem. As the sentence stands the word cannot be paraphrased and it is difficult to eliminate the uncertainty. The presence of the word "shepherd" may suggest a sheep-pen whereas the word "picked up" suggests pen may be something which is held in the hand. There is nothing in the content to indicate specifically which of the meanings of "pen" you have here. It is almost impossible to translate this word without a good guess, until a fuller content has been established. This is a process which must be gone through whenever we read any piece of text whether there is any obvious ambiguity or not.

To understand the meaning of a text would appear to be largely an elimination of uncertainty but often this is a gradual process. It may be more a case of the gradual reduction of uncertainty. A/-

1. Ibid (p. 192) P.54

A good example of this is the title of Mollie Hunter's book - "The Lothian Run",[1]. where total elimination of uncertainty might be postponed. We are able to eliminate so much from the grammatical structure. The word "run" appears to be a noun but this is not absolutely certain. "Lothian" could be a plural noun as in "sheep run". It is not until the reader gets enough information about the book and realises the novel is about smuggling that all these grammatical points become redundant. They become redundant because the possibility of "run" being a verb or 'Lothian' a plural noun is rejected and we realise that "The Lothian Run" is an adjective plus noun phrase reforming to a route for smugglers in eighteenth century Scotland. It seems that this is a good example of what it means to understand a text. We must be able to assimilate the words at a linguistic level, that 'Lothian' is not 'Russian', that 'run' is not 'car'. But we also have to relate these words to a wider background of knowledge - here smuggling. The extent of the linguistic information directs the reader to a particular pattern of thought; the wider context of thought clarifies the linguistic information. The two processes are interdependent. Presumably someone familiar with eighteenth century smuggling in Scotland sees the meaning immediately whereas others start from the linguistic end and the wider context comes from a reading of the book.

Carroll and Freedle[2]. refer to this using different examples. "But what kind of comprehension could one expect when the reader reads the sentence for the first time? He/-

[1]. Mollie Hunter, "The Lothian Run", Puffin Books, 1971.

[2]. Ibid P.27

He could be expected at that point only to comprehend enough of it to get himself set to disambiguate the subsequent text at whatever pace the writer's design and the reader's patience would permit, and in this case we could say that comprehension entails the apprehension of just that amount of linguistic information that is committed to the sentence - information that could be captured in a set of linguistic rules". In other words, the reader hasn't completely understood the particular expression, say in this case "The Lothian Run", but a certain reduction in uncertainty has taken place by virtue of the "committed" meaning of the linguistic units. They continue "This line of argument suggests that an 'adequate' comprehension of a message at the time of its reception may be achieved by the comprehension of just that linguistic information that is 'committed' to the message in terms of its own structures and in terms of whatever information has been disclosed by virtue of previous context. Some of this information may be of ambiguous character, to be disambiguated by later information, provided that memory for the former is adequate. At a later time comprehension becomes more complete".

If total meaning is partly dependent on the knowled ge of a wider context, then it should be possible to look at particular passages and consider what knowledge would be helpful to a reader in ascertaining meaning by elimination of uncertainty.

The passage I want to consider is an extract from "The Island of Horses"[1]. The sort of points I would want to bring to a reader's attention would be a general knowledge of the sea and fishing.

[1]. Ibid (pp. 125-126) P.14

The reader's experience of different language varieties is also important; here the kind of language that politicians tend to use - "It's people like you who are ruining this country....." with the repetition of people in the last part of the passage. What is also important is the experience necessary to recognise sarcasm, experience of the behaviour of fanatics and knowledge of the nature of prejudice.

Some of these p oints I would want to raise in questions before asking pupils to read the passage.

The Purpose of Questions in General (including Problems in the Design of Questions on the Passage)

Various devices for enhancing the comprehension of passages have been investigated and researched. My main concern here is the use of questions which are set prior to reading a passage. Before going into this in detail, however, I would like to give some indication of other work concerned with the use of questions set before reading a passage, the use of questions set in the middle or in parts throughout the passage and after a passage has been read. Then I shall compare this with the way I have used pre-questions.

In this connection, Gibson and Levin describe an interesting experiment by Rothkopf and Bisbicos.[1] Two sub sets of questions were made up from Rachel Carson's book, "The Sea Around Us". One set of these questions was used for questions interspersed throughout the text, the other for a final test. The two sets had been checked for transfer and had been found to be negative. The experiment was conducted as follows. Subjects (college students) read a long prose passage with two written questions interspersed after every three pages. There were three main groups: an experimental group that had questions referring to what they were about to read, another that had questions referring to what they had just read, and a control group that had no interspersed questions. Following this, the subjects took two tests. One measured the direct instructive effect of the 'adjunct' questions themselves. The/-

[1] E. Z. Rothkopf and E. E. Bisbicos, "Selective facilitative effect of Interspersed Questions on learning from written materials". Journal of Educational Psychology, 58, 1967.

The other administered the questions that the subject had not been exposed to, to see whether the interspersed questions had provided a general effect on study behaviour. The experimental group that had the questions following the three pages of text performed significantly better in the second type of test than the other two groups, which did not differ. Thus only questions administered after the relevant portion of the text improved general study behaviour, (such things as inspection behaviour, problem solving, concentration). Both experimental groups performed better than the control group in the first type of test measuring direct instructive effects of questions. From this Gibson and Levin suggest that if the pupil reads along knowing that questions are coming, but not exactly what ones, he adapts his behaviour to picking up any facts that might be relevant, but if he knows the questions ahead, he limits his extraction of information to just what he needs and no more.

Despite this difference in activity all the questions here were directly linked to a passage. When I used pre-questions in my experiment they were quite separate from a particular passage and they could be answered on the basis of general knowledge. While the interval between answering these questions and seeing a passage may have been only a matter of five to ten minutes, nonetheless it must be emphasised that these questions were answered without a passage.

It is also my contention that pre-questions, as I have used them and questions after the passage have something in common.

Tulman/-

Tuinman[1] argues that interpretation questions do not always test reading ability. It is possible to answer the questions without having read and understood the passage. However, what Tuinman doesn't seem to appreciate is that the same volume of background knowledge is still available to the reader when faced with a question which calls for a more demanding analysis of the passage. In other words, Tuinman's article, despite his conclusions, proves that background knowledge is important.

In discussing the difference between responding to a pre-question and in responding to a question after a passage it is important to consider the way in which learning takes place.

It is probably important to realise that individual facts are not learned independently. They are internalised only if they are somehow related to the pupils' experience or if the pupil has some kind of content or surrounding meaning he can apply to new facts. Putting this another way, learning is a patterned activity. One fact is linked somehow to another one. When I say 'fact', I use 'fact' in a general way. When a pupil, for example, hears the word 'gun' mentioned, he may be thinking of war, or games or Indians - the activities are grouped together in his mind. He or she will only use this association or grouping as and when he needs to.

When a pupil is asked a question before reading a passage, he is being asked to sift through all the patterns of his previous experience to find the correct answer.

1. J. J. Tuinman, "Determining the passage dependency of comprehension questions in five major tests", Reading Research Quarterly, Vol. 19, pp. 206 - 223, 1974.

It may be that in finding the correct answer he has to establish further patterns in his knowledge.

The ability to answer the question will depend on the extent of his knowledge but the reason for this knowledge can take several forms - it can be linguistic - through listening, reading or watching T.V., or simply from what he sees about him. In other words his general knowledge will either give him the answer or not - this general knowledge will indeed be general - i.e. general experience but the experience will be partly a linguistic one. This, however, takes me to the nature of the linguistic activity and its similarity to learning. What British linguists have stressed is the way in which language learning, the learning of speech, grammar and indeed reading (we assume in this distinction that the pupil is a reader) is a patterned activity. We learn about language by using it and we use it mainly in groups.

It is my contention or assumption (given the age range which we are dealing with) that these elements, i.e. the knowledge gained simply from watching the world around one and what I call linguistic knowledge - the ability to recognise the meaning of words and their place in the structure of a sentence - are inseparable.

This then brings me on to the second part, the task of responding to a question after the passage has been read. This to a certain extent will be determined by the nature of the question - say the passage is about spies - the question may be "What have you learned about spies?" - Here I would submit that the task is exactly or at least very much the same as the pre-question, i.e. What/-

What do you know about spies? - Let us examine the nature of the task in more detail. The pupil has to read through the passage and comprehend the material. He must be able to go through the material and relate it to his experience - this will involve going through his past knowledge and relating it to what the passage says. Also he will have to use his linguistic knowledge as well to structure the passage into manageable groups. The greater his comprehension is the larger the group. The degree of understanding and linguistic grouping will depend on the kind of questions asked, i.e. What did the spy wear? doesn't call for anything like the structuring and interpretation of the question "What have you learned about spies?" Nor is it likely that there would be much point in any pre-question which helped the pupil to information which would be readily available (at least to some pupils) in the passage. All that can be argued here is that if the phypothetical passage on spies was also dealing with active conditions then a pre-question about keeping warm in cold conditions might be some help to the pupil. One would expect that he would more readily find the answer to such a question on the passage if he had started to think already about clothing and keeping warm.

In a question like "What was the spy wearing?" which seems to ask for a detail or asks the pupil simply to recall information which he has read, it can be argued that the process, even here, is not dissimilar to a pre-question - "What do you know about spies?"

The/-

The pupil has to recall previous knowledge in both questions and has to try to acknowledge what he does know and eliminate what isn't relevant. In the pre-question the reader has to eliminate all the knowledge he possesses that has no relation to spies. In the post question he has to eliminate all the information from the single passage which does not relate to the particular question.

To sum up here, it seems there is no basic difference in the task of responding to a question before or after reading a passage - the only difference is in the breadth of knowledge required for the response.

PROBLEMS IN THE DESIGN OF THE QUESTIONS ON THE PASSAGE

One problem which emerged, as discussed on pp. 54 - 57 in the experiment was the designing of questions on the passage, i.e. the post-questions. It was clear that the aim of the questions was to test such things as Inference, Metaphor, Imagery, Tone, Writer's intention, awareness of different kinds of language as well as recall. Some of these aspects were fairly easy to deal with such as Metaphor and Language Variety. But the extent to which the reader identifies with the writer's aim is difficult to measure by a conventional question. Yet to ask the pupil to write a short essay based on one or two lead topics, while valuable, would have made objective measurement between the two groups difficult. It was possible in the pre-questions to invite an elaborate answer to some of the main items in the passage but in the post-questions this wasn't the case since some attempt at measurement and comparison was necessary. Here I had to try to attempt some kind of objective measurement while at the same time trying to emphasise and accommodate aims which were difficult to measure in a precise way.

Consequently after considerable difficulty with the initial test, I used multiple choice format for several of the questions. This covered items such as recognition of metaphor, inference, character analysis and evaluation of arguments. While the multiple choice may have restricted the response to some extent, I felt that it was a reasonable compromise. In order to have scores of sufficient magnitude for the purpose of comparison, I included a few questions which were based on recall and knowledge of vocabulary.

The/-

The problem raised in Tuinman's article[1] that some interpretation questions can be answered without resorting to reading the passage is worthy of comment here. While I was unable to have the interpretation questions checked out by use in a test situation or scrutinised by other teachers, I did consider that they reflected what I took to be the important points in a passage.

[1] Ibid, page 67

THE HYPOTHESIS AND THE EXPERIMENT

(Including a Study of the Pre-Questions Set)

The study is concerned with how pupils understand a passage and whether there is any way in which they can be helped to understand a passage better.

In the first instance we have already considered what we mean by saying that a pupil understands a passage but the aim of the study will be to consider how he can be helped to answer questions which are set on a passage. The questions will clearly be designed to test as fully as possible the meaning of a passage, including any points made in the passage which are implied rather than specifically stated. I will experiment with different types of pre-questions to see if there is any difference in the pupil's ability to understand a passage. The purpose of the pre-questions will be to stimulate the pupil as he thinks of the answer to think about certain facts and ideas which he is likely to have heard about or thought about already. When he comes to read the passage and to answer the questions on it he will have those ideas from the pre-questions still in his mind. Since these will be related to a passage they should help him to appreciate the content of the passage and since content, I feel, is so vital to the understanding he should be able to understand the passage better and to answer the questions on it better.

The hypothesis is that if pre-questions are given to one group and not to another there will be a significant difference in the performance of the two groups.

In making up the pre-questions, I was trying to make the pupils think about the background of ideas to the passage. Obviously each of the passages used didn't involve using each Category in Barrett's/-

/Barrett's taxonomy but I did try to use the pre-questions to enable the pupils to think about what was important in the passage particularly with regard to writer's aim and particular use of language. The main purposes of the pre-questions and also the different kinds of pre-questions are as follows:-

The two main purposes of the pre-questions:

1. To try to get pupils to recall facts and even to put the facts that they have into the right content. This may include help with the meaning of words.
2. To help pupils to understand ideas which are only implied in the passage.

The old man's comment in the extract from "The Island of Horses", Text One (pp. 65, 66) - 'you must be from one of the islands' - is irrelevant, it has nothing to do with the old man's determination to have a factory. It also shows that he, a mainlander, is prejudiced against the island community. It, in turn, also shows that prejudice is illogical. The pre-questions here would presumably involve discussion or thought on some relevant aspect of this idea, e.g. Why do people of different race/colour quarrel, go to war? The passage deals with a particular example. In this way the pupil is led from the implicit, a suitable pre-question on prejudice, through the explicit and in this particular example to something implicit about the nature of prejudice asked in the pre-question which should become clear in their answers.

The different kind of pre-questions:

(a) Those questions which ask a direct question such as:

What/-

What is the colour of smoked herring?

What is the difference between?

What is the relation between?

(b) Those questions which ask them to think of several examples of something in an attempt to get them to see a pattern between all the different examples they consider, e.g. Test Three, The Rossmore Men.[1] - pre-questions 1, 3, 4.

(c) Those questions which ask them to consider issues related to particular situations - What effect does living out of doors have on peoples' appearance? Another example of this is in the Mike Coffey test,[2] pre-question 2, where 'whispering' suggests something beyond its explicit statement, making a comment about the relationship between the boy and his father.

(d) Those questions which ask readers what they would do in a particular situation. Here the pupil is able to set his speculations against his reading as in the question, "What would you do if you found shipwrecked sailors on the beach?"[3]

In the first test it was decided to take an extract from "The Island of Horses" and to use it to see how far alerting the pupil to the general ideas contained within it would help him answer specific questions set on the passage. The sort of points to be considered in the pre-questions were t he general ones about human behaviour and prejudice and also questions on language and how language is used.

1. Appendix (this thesis), p. 115

2. Appendix (this thesis), p. 116

3. Question 2, p. 84 (this thesis)

In all cases the pupils were in the First Year of a Scottish secondary comprehensive school and the classes were of mixed ability, boys and girls being in separate classes (though this does not apply to later tests). The pre-questions were duplicated and issued to pupils. The pupils who had to answer both pre-questions and set questions were handed the pre-questions and given sufficient time to answer them. These answers were then taken in and then they were handed the relevant text and were given the set questions to answer and again given sufficient time to do them. In the case where the pupils were only to answer the set questions these were given out and the same amount of time allocated to them. Since this test was not entirely conclusive it was decided, using the same passage, to simplify the pre-questions (page 84) and to change the set questions to multiple choice format (page 87). The procedure was the same as that outlined earlier. The classes involved were two boys' classes, one with pre-questions and one without, and a first year girls' class (with pre-questions).

Once the test had been administered, the results were analysed. It was discovered that the two boys' classes were identical in their results. In other words, there was little to suggest that the pre-questions were of any particular help. However, the girls' class who had the pre-questions did very much better than the boys. It was difficult to decide here whether the girls did better because they had the pre-questions or whether in spite of being a mixed ability class they were a more intelligent class than had been expected.

A way of getting round this problem was sought and it was decided to find two passages of equal difficulty (using the Fog Index)[1]. and to make up pre-questions and set questions for each passage. Two classes of pupils were chosen, a boys' class and a girls' class and each were given one passage with pre-questions and the other passage without pre-questions. In each case the alternate passage was given with the pre-questions. (passage and questions enclosed). Both passages were again taken from "The Island of Horses". The tests were administered in the usual way.

In the next set of tests there was a greater variety of method. Two classes were given pre-questions to answer before they read the passage and were then given the passage with a set of post-questions to answer. The next two classes were allowed to read the passage in groups, discussing anything they found either interesting or difficult to understand and were then given passage and post-questions. One group were asked to read the passage silently and then later they were given the passage with questions. The last three groups were asked to read the passage and answer the questions.

In this case the classes were mixed (boys and girls together).

Now it might be worthwhile to consider the different kinds of pre-questions which were set.

In Tests 1

Question 1. What effect does living out of doors have on peoples' appearance?

Clearly/-

[1]. J.Gilliland, "Readability", pp. 93, U.L.P., 1972.

Clearly this is an example of 1 - recall of fact. Pupils are asked to recall previous knowledge about the effects of exposure, about living out of doors to enable them to deal with the phrase "the colour of smoked herring". The question in itself is valid but inadequate to deal with the phrase completely. A question on the colour of smoked herring was also necessary. Some pupils didn't know the colour of smoked herring or they didn't see the connection. What is also implied here is that the man's appearance was slightly ludicrous. No pre-question was set on this aspect of the passage.

Question 2. What would you do if you found two shipwrecked sailors on the beach?

Here the pupil is free to speculate, to consider what is the normal thing to do in certain circumstances. They can consider the passage in relation to a norm and whether the passage fulfils or deviates from that norm.

On closer examination some questions did not fulfil the criteria already laid out.

In the same test - Questions 3 and 4.

In what ways do you think a new factory would affect the lives of either (a) a fishing village or (b) a farming/country area? Here the explicit information in the text was quite adequate to deal with this question and therefore the pre-question gave no more help than the text itself. The same observation applies to 4. "How do people set about changing things in their local area or town?"

Question 5. What kind of things do people of rival communities think and say about each other?

This is an example of (b) (see different kind of pre-questions), where the pupil may see a pattern between the different examples he finds. In the revised test (1) - What do you think about people who have different ideas from your own? - was an attempt to make the question nearer children's experience. This is another example of (b) but here not so helpful since possible answers may simply echo the words of the old man.

The pre-questions on "Mike Coffey" and "The Rossmore Men" (passages enclosed) are also relevant to this discussion and the passages are set out in the Appendix (pp.111-117)

Mike Coffey

Question 1. What kinds of business men would be likely to visit the remote islands frequently?

This question is valid in terms of criteria set out but offers the pupil no more help than the text itself which states quite clearly what Mike's occupation was.

Question 2. If you are always whispering in someone's presence, what does it suggest to you about your attitude to that person?

This is a good example of (c) where readers are asked to consider general issues related to particular situations. "Whispering" here clearly suggests fear of the father.

Question 3. If someone came to your house for the first time how would you expect them to behave?

Here the pre-question is of little help since Coffey's behaviour is described and is clearly considered unacceptable.

Question 4. Why can visitors in your house get away with things that you wouldn't be allowed to?

This pre-question is really a leading question, it makes an assumption which isn't necessarily the case. It is stated that "the people were too polite to discourage him". Politeness is the governing idea here and there is no difficulty in finding this in the passage.

The Ransome Men

Questions 1 and 2

1. What sort of things are most likely to cause trouble between different groups of people?
2. What do you need to take into account in choosing footwear when walking in mountainous country?

Question 1 fits criterion (c) but on close examination of the text, I found the need for this question was doubtful. The boy gives his own reasons why he thought there was bad blood between the two communities. He does, however, admit that "There was an old, old story behind this" and that "people's blood boiled whenever they thought of it". The pre-question here might serve to start the reader thinking about what the story might be but that is all it would do - there is no difficulty here since there is nothing implied here. All that is needed here is more information - which in fact is given later in the book.

Question 2 could be answered directly from the text and consequently its value is doubtful.

Questions 3 and 4. What kind of property arouses most respect in other people?

4. Why is praise from an enemy greater than praise from a friend?

Question 3. here helps readers realise the boy's fear that the horse might be stolen or hurt.

Question 4 is helping pupils formulate ideas only implied in the passage and also asks them to consider issues related to particular situations.

Before making up questions in the extract from "The Island of the Blue Dolphins",[1] I thought it might be worthwhile outlining what was implied in the Text - Paragraph 5 - "Night was coming" on page 80 to the end of the chapter, page 84.

1. Loneliness - the need of human beings for companionship.
2. Instinct of human being to save life and preserve life.
3. Relationship between man and animals.
4. Human desire to hunt - human desire to master and domesticate.

The following are the pre-questions:

1. Why do people keep animals? Give three reasons.
2. If you were to find a large wounded animal, what would you do about it? Give reasons for your action.
3. What sort of things do hunters take into account when following the trail of wild animals?
4. What skills do you think you would need to learn if you were to live alone on a desert island?
5. What are the dangers of keeping larger pets?
6. In what ways do animals communicate with each other?

7./-

1. Scott O'Dell, "The Island of the Blue Dolphins", Puffin, 1960.

7. How do you go about choosing a name for a pet?

It is now possible to analyse each question by reference to the type and purpose mentioned earlier. Thus Question 1 is an example of (b) where the pupil is asked to think of different examples of something to get him to see a pattern between all the different examples he/she considers.

Question 2 is an example of (d) - What would the reader himself do in a particular situation?

Question 3 is asking pupils to recall facts and to help them fit these facts into a pattern.

Question 4 is an example of purpose 1 - recall of facts and putting the facts they have into the right content - and type (a) - asking a direct question. It also overlaps type (d).

Question 5 is an example again of purpose 1 and type (a), the same is the case with question 6.

Question 7 is an example of type (b).

THE RESULTS

Three sets of tests were administered over a period of about one year. In each set of successive tests, the results became more encouraging and in the last set of tests the results were very encouraging. I was able to draw some interesting conclusions from all the tests administered.

The First Set of Tests

Passage - "The Island of Horses",[1] together with pre-questions and questions on the passage.

The classes involved were two boys' classes, one with pre-questions and one without and a First Year girls' class (with pre-questions). When the test had been administered the results were analysed. It was discovered that the two boys' classes were almost identical in their results. In other words there was little to suggest that the pre-questions were of any value. However, the girls' class did very much better than the boys. It was impossible to decide here whether the girls did better because they had the pre-questions or whether, in spite of being a mixed-ability class, they were in fact a more intelligent class than had been expected.

Average Score - First Set of Tests

With pre-questions: 1st Year Girls (25 in class)

Average score out of 5 - 3.

With pre-questions: 1st Year Boys (21 in class):

Average score out of 5 - 2.

No pre-questions: 1st Year Boys (18 in class)

Average score out of 5 - 2.

1. This thesis, pp. 84-87

Breakdown of Individual Scores for each Question (Boys and Girls)

	With Pre-Questions (Boys and Girls)		Without (Boys)	
Question No.	Wrong	Correct	Wrong	Correct
1	27	16	10	11
2	20	23	16	5
3	19	24	10	11
4	25	18	19	2
5	25	16	10	11

Pre-Reading Questions (Island of Horses)

1. What effect does living out of doors have on people's appearance?
2. What would you do if you found two ship-wrecked sailors on the beach?
3. In what ways do you think a new factory would affect the way of life on people working in either:
   (a) a fishing village, OR (b) a farming/country area?
4. How do people set about changing things in their local area or town?
5. What do you think about people who have opinions or ideas different from your own?

TEST ONE

The half-door was shut. Then, while we watched, a man appeared and leaned his elbows comfortably on the top of the door. He was tough and hard and wiry, like a thorn-tree. His face and his hand, curled around the bowl of an old clay pipe, were the colour of a smoked herring. His little eyes blinked at us through steel-rimmed spectacles that added to his air of ancient wisdom. He examined us shrewdly, from our still-damp clothes to our salt-spiked hair. When he spoke, his voice was soft and a little hoarse, as if from lack of use.

"You've been in the sea", he said. "Your boat is gone, I'm thinking, after the storm".

We nodded. He leaned more comfortably on the door and brought up his other hand to cradle his pipe.

"That just proves what I'm always saying". He sighed with a mixed air of impatience and satisfaction. "There should be a factory here for canning fish. Now, if there was a factory, you wouldn't bother going out fishing on a stormy night in a bad boat. You'd be working in the factory, drawing your money every week like a lord, instead of being in daily danger to life and limb out on the wild ocean. That's what I told the Department. Two hundred and forty-seven letters they've had from me in the Department about that canning factory - and not a stamp on a single one of them!"

His eyes sparkled with triumph. Pat said, a little tremulously:

"Please sir, we're hungry".

"You see!" said he. "If you were working in my factory you wouldn't be hungry. Why? Because you'd be a wealthy man. Because you'd have money in your pocket - - ".

"But who would catch the fish?"

I could not resist asking the question, in spite of my exasperation. A moment later I wished I had kept silent. He turned a coldly contemptuous eye on me, glinting angrily through his glasses.

"It's people like you that are ruining this country", said he. "People without vision, without enterprise, without imagination. People with small, mean minds. People that are only out for themselves". He laughed delicately. "Of course, you must be from one of the islands. I hear they're very backward out there".

Eilis Dillon.
'The Island of Horses'.
(pp. 125 - 126)

Questions on the Passage

Answer each question by underlining the letter which gives the correct answer (e.g. B).

1. "The colour of a smoked herring" (lines 4, 5).

   This suggests that the old man was:

   A. old? B. tough? C. brown? D. weather-beaten?

2. What did the two boys expect the man to do when he met them -

   A. to start talking about a factory?

   B. give them food?

   C. talk about the storm?

   D. lose his temper?

3. The old man's scheme was impractical because:

   A. he had no money?

   B. the Department won't help him.

   C. there would be no one to catch the fish?

   D. the people were too backward in the area?

4. "And not a single stamp on one of them". The old man did this because:

   A. he was a miser?

   B. he liked to spite people?

   C. he was poor?

   D. there were no post-offices about?

5. What does the old man think of people who oppose his scheme?

   A. Stupid? B. Unimaginative? C. Mean? D. Childish?

Distribution of Scores by Classes

	Pre-Questions			No Pre-Questions	
1st Year Girls (25)		1st Year Boys (21)		1st Year Boys (18)	
Wrong	Correct	Wrong	Correct	Wrong	Correct
57	68	65	40	59	31

Some General Observations

1. The pre-questions appeared to have helped the girls' class, and we might conclude that they were generally helpful.
2. By comparing the total number of correct answers given on each question with the correct answers it would appear that those who had pre-questions answered Questions 2 and 4 better than those without the pre-questions. (If we compare boys who had pre-questions with those who did not the same result is confirmed).

Because of these results and later evidence a close study was made of the kind of pre-question asked and what type of pre-questions would help the pupil comprehend the passage and help him answer questions on the passage without at the same time prompting an answer. A discussion of the different types of pre-questions are included in another part of the dissertation. (The Hypothesis and the Experiment, p. 73).

No real attempt, however, was made to see to what extent the kind of answer given to the pre-questions helped the pupil comprehend the passage. This may be a possible future area of study.

The Second Set of Tests

(a) Passage on "The Rossmore Men" - questions and pre-questions (Appendix pp. 1 - 2).

(b) Passage on "Mike Coffey" - questions and pre-questions. (Appendix pp. 3 - 4).

It was felt that whatever results were drawn from this first test they were to some extent coloured by the problem that one class (the girls) was by chance apparently cleverer than the other two. A way of getting round this problem was sought and it was decided to use two passages of equal difficulty (using the Fog Index) and to make up pre-questions and set questions for each passage. Two classes of pupils were chosen - a boys' class and a girls' class - and each was given one passage with pre-questions and the other passage without pre-questions. In each case the alternate passage was given with the pre-questions.

Results of the Second Test

Girls with Pre-questions	Girls without Pre-questions	Boys with Pre-questions	Boys without Pre-questions
Mean score: 4.7.	Mean Score 4.5.	Mean Score 4.	Mean Score 3.6.

The results of the tests taken seem to suggest that the pre-questions were helpful. In both cases the test in which the class had the pre-questions was done better than the test without them. In the case of the boys the difference was greater than in the case of the girls. However, since the number of pupils was rather small, it was decided to carry out a 't' test of significance to see how far the results were meaningful.

It was suggested that the results be considered in the following way:

(a) Boys (with pre-questions 4, without 3.6).

Here the 't' score worked out at .9410. Table 2 "Statistics for the Teacher" - A. C. Crocker,[1] page 68, suggests that to reach significance, the value of 't' with a count of 30 pupils or over, should come to 1.960. In my particular case the number of pupils was 40. This would suggest that the difference in score was not significant.

(b) Girls (with pre-questions 4.7, without 4.5). Here the 't' score worked out at 1.3, again lower than the 1.960 needed. Again, however, the number of pupils was over 30, the limit for using 't' on this formula.

On the testing done so far we can conclude that the pre-questions were generally helpful (i.e. those who had taken pre-questions had a higher mean score), but th at the results were not sufficiently great to suggest that this helpfulness was conclusive. Further tests and research would be necessary before any conclusion could be drawn.

[1] A. C. Crocker, "Statistics for the Teacher, p. 68, Penguin, 1969.

The third and final set of tests

In this set of tests there was a greater variety of method. Two classes were given pre-questions to answer before they read the passage and were then given the passage with a set of post questions to answer. The next two classes were allowed to read the passage in groups, discussing anything they found either interesting or difficult to understand and were then given passage and post questions. One group were asked to read the passage silently and then later were given the passage with the questions. The last three groups were asked to read the passage and answer the questions.

The results of the tests. Mean scores for each group.

With Pre-questions.	Group Discussion.	Read Silently.	No Help
13.7 (5.9)	13.6 (5.0)	11.7 (5.9)	11.4 (4.2)
15.4 (5.0)			9.9 (5.0)
			12.4 (5.0)

It was possible in this instance to compare the results of the tests with the results of two conventional interpretation tests (where no teacher preparation was involved) previously administered within the same 2 - 3 months. The scores for these tests are expressed in terms of stanine grades and the average grade for each class is shown in brackets.

It can be seen from the above table that some classes had similar stanine averages but had achieved different scores in this set of tests. These differences, I felt, were well worth giving particular attention to, as well as the areas already indicated.

The most obvious point from the table of results is that with the exception of the 11.7 score where the passage was read silently all classes which had some kind of introduction to the passage scored higher averages than those classes which had received no help. To check whether these scores were significant or not, I used the Mann-Whitney test of significance.

COMPARISON OF SCORES FOR MANN-WHITNEY TEST OF SIGNIFICANCE

	HIGHER SCORE	MEAN SCORE	LOWER SCORE	MEAN SCORE	MANN-WHITNEY TEST
1.	Pre-questions (one group)	13.4	No preparation (one group)	8.9	Significant
2.	All pre-questions + Passage read in Groups (Discussion)	13.4 13.7 13.6 13.2	No preparation	11.4 8.9 12.4	Significant
3.	All pre-questions + passage read in groups (+ discussion) + passage read silently	13.4 13.7 13.6 13.2 11.7	No preparation	11.4 8.9 12.4	Significant
4.	All pre-questions	13.7 13.4	Reading passage silently	11.7	Not significant
5.	All pre-questions + passage read in groups with discussion	13.4 13.7 13.6 13.2	Silent reading	11.7	Significant
6.	Pre-questions	13.7 13.4	Group discussion	13.6 13.2	No significance
7.	All pre-questions and passage read in groups with discussion	13.7 13.4 13.6 13.2	Passage read silently and no preparation	11.7 11.4 8.5 12.4	No significance
8.	Silent reading	11.7	No preparation	11.7 11.4 8.9 12.4	Not significant

Summary of Findings When the Mann-Whitney Test is Applied

1. One group with pre-questions as against one group with no preparation at all and where the Stanine score is identical - higher score is significant.

2. All pre-questions and passage read in groups (with discussion) as against no preparation - significant result.

3. All pre-questions and passage read in groups (with discussion) and passage read silently as against no preparation - significant.

4. All pre-questions as against reading passage silently - not significant. This result seems to suggest that silent reading of the passage was not totally negligible. In other words continuous careful study of the passage is just as helpful as pre-questions. This is an area which might require further testing.

5. All pre-questions and passage read in groups with discussion as against silent reading - the higher result here is significant.

The 1.93 score suggests that significance is just obtained. (The Stanine scores are poorer in groups where pre-questions and group discussion is used than in the silent reading group). This score would tend to suggest that silent reading is not as helpful as the other two methods.

6. Pre-questions as against group discussion - no significance. This would suggest that some form of stimulus is helpful to the pupils. This can come either from the teacher who has considered the issues raised in the passage and has prepared specific questions on these issues to direct the children into the passage or/-

/or it can come from the other pupils, not from asking questions directly, but from the natural discussion stimulated by the passage itself. In other words, the issues which the teacher has recognised in the pre-questions are likely to be raised in general discussion and become clearer to the majority of the pupils. In both classes where Group Discussion was used there was a wide range of ability in terms of conventional interpretation scores. Stanine scores in one class varied from 1 to 8 and in another from 2 to 8. This would suggest that during the Group Discussion those who were normally able to perceive the issues quickly helped the other pupils and pulled up the average performance of the class. The average Stanine scores in those classes was no higher than those working with pre-questions plus silent reading.

7. Pre-questions and passage read in groups as against passage read silently and no preparation - no significance.

The lack of significance found here would suggest that reading a passage silently for a period before answering questions on it does make a difference. In other words, the constant repetition of re-reading an account of an incident will direct the reader to some of the issues raised. It has some of the effects of group discussion in that the reader raises the issues in his own mind but the results mentioned in Section 8 (below) which show the closeness of the averages between the silent reading group and the no preparation group would suggest that this method is not as effective as the pre-questions and group discussion.

8./-

8. Silent reading versus all questions (without preparation). Since the averages are so close, I have not applied the Mann-Whitney test here.

As explained above in 7, these results would suggest that though silent reading of a passage before answering questions on it does improve the score on the test questions, it is not as helpful as some form of external stimulus as applied from a teacher or some other pupils.

The experiment was conducted with 1st Year mixed ability classes of pupils (aged 12). These classes in the first and second set of experiments were not mixed though the final set of tests had mixed classes. S.1 classes were of equal ability in terms of general performance at Primary school and consequently one class was used as a test group and one as a control group. Several considerations, however, must be taken into account in the light of the conclusions that the pre-questions were generally helpful. Some of these have already been conceded, e.g. that the girls' class was probably more mature than the boys. But perhaps more far-reaching is the shared element in the pre-questions and post-questions. In other words, if a class are good at post-questions as marked by a teacher, might it not also be the case that they are 'good' at pre-questions? Therefore, though the answers to the pre-questions were never assessed, it may be that there is a general ability in answering questions (no matter how simple or complicated the activity may be) which would enable a class to do well in both.

It would not then prove that pre-questions had made the improvement. The evidence might have been more convincing had the pupils been those who had particular difficulty in answering post-questions correctly. This in my opinion, was obviated to some extent where it was possible to compare two classes with low interpretation scores expressed as Stanine grades.

These interpretation scores were based on previous interpretation tests which had been marked across the year group. Pupils were placed in bands according to the score they had made. To get the average stanine of a class, the bands were averaged. This meant that you could obtain a picture of the average ability of a particular class in answering interpretation questions but the stanines did not bring about a change in the class divisions so that it was possible to have clever pupils in a class whose average was poor and vice versa.

It was not possible at any time to extract pupils from the particular class so that no selection could be made at any time of people who had a particular interpretation score.

Design of the Experiment

The aim of the experiment was to observe if there was any measurable difference between the comprehension scores of children who had answered pre-questions and children who had not. Consequently in this case, I take the dependent variable to be performance in comprehension tests and the independent variable to be the provision of pre-questions by the teacher and the answering of these by the pupil prior to reading the passage.

Usually both the independent and dependent variables are measured in such a way that it is possible to obtain the relationship between the dependent and independent variables.

In this experiment, however, it was difficult to vary the supply of pre-questions in relation to the same passage and ascertain whether this had any effect on later performance. But the nature of the relationship between the independent variable and dependent variable is also made difficult simply on account of an area of similarity between the two activities - i.e. answering questions in both cases. Consequently in this case the relationship is an all or nothing one.

In our example the independent variable is not a subject variable such as, say, level of hunger. Nonetheless it might have been possible given a different situation to have varied some of the conditions such as greater experimentation with the pre-questions. The pre-questions are those I made up but they may not represent enough of a "majority interest" in the topics contained in the passages. Thus it might have been useful to have asked teachers and pupils to have written down what they take to be the most important points in the passage.

One variable which I could not control was fatigue. Thus the tests were taken at different times of day by different classes. Also most of the pupils taking the pre-questions took the rest of the test in the same sitting.

The design of my experiment was to a large extent detailed by my own position as a practising full-time teacher and also by the position of the school-children. Neither my time-table nor the ethos of the school favoured testing situations which could not be easily accommodated. In other words, the testing involved a whole class (First Year Secondary, mixed ability) at a time when that class were present in the English Department. It would, for example, have been difficult to have extracted a group (or two groups) of children and worked with that group of children all the time. Nor was it possible, therefore, to follow clearly the progress of an individual pupil. Consequently my results are expressed in terms of classes and therefore only represent trends.

Given the nature of the relationship between the dependent and independent variable, I think the best condition would have been a matched subjects design where the matching is performed in terms of a third variable which the experimenter believes is likely to affect the dependent variable. Thus in a comprehension task, it would be possible to match subjects in terms of a comprehension score previously measured or perhaps in terms of intelligence. Because of a similarity in the two activities, post and pre-questions, I would want pupils who were weak at comprehension. The members of the pairs would be allocated randomly, one to each of the experimental conditions. This/-

/This would then allow for individual comparison as well as group. Comparison by class is a problem presumably because some children in both groups are doing badly in both and well in both. It was possible eventually to appeal to a control group in my own testing but this again was only in terms of class results. No comparison was made on an individual basis or study and consequently this makes replication of the experiment for the same results difficult.

In addition, I want to stress that because the S.1 class were of equal ability, I was not working with random samples and though chance made a slight difference in the composition of each group it was purely chance. What I was describing in the last paragraph was the ideal situation. Therefore all findings are very preliminary and tentative.

THE CONCLUSION

To sum up my results, it would appear that pre-questions and preparatory discussion help pupils to answer questions set on a passage. This stimulus can take the form of either the pre-questions or group discussion (as tested in the last experiment) in which issues in the passage are raised. Pupils are questioned on certain points which seem to be more important than others in the passage and are asked to recall facts and ideas from their previous knowledge which might be considered relevant. Where pupils are left to discuss the passage in groups themselves they also answer more accurately than those who receive no help. This is presumably because they point out to each other points which are of especial interest. In this situation one pupil acts as a stimulus to the other and each pupil is gaining from the other's knowledge. It would appear that being stimulated to appreciate the background (be it social, economic, moral, political) and the ideas of a passage before he/she reads it helps a pupil to understand it better.

This would suggest that what is important in understanding a passage is appreciating the context. In other words, the child who has been prompted towards the correct context will read it more fluently and with greater understanding than the reader who is not understanding the context.

Each of the different types of pre-questions, as indicated on the chapter - The Hypothesis and the Experiment - attempts to stimulate the awareness of different types of context. The main purpose of the pre-questions are:-

1. To try to get pupils to recall facts and also to put the facts which they have into the right context.

2. To help the pupils understand ideas which are only implied in the passage (please see chapter quoted).

The different type of pre-questions are also set out and discussed in this section. These are:-

(a) Those questions which ask a direct question.

(b) Those questions which ask them to think of several examples of something in an attempt to get them to see a pattern between all the different examples they consider.

(c) Those questions which ask them to consider issues related to particular situations.

(d) Those questions which ask readers what they would do in particular situations.

All this bears out the ideas expressed by Huey[1] that an efficient reader is constantly grasping the context in advance of the eye so that the eye can travel over the page picking up items very rapidly, settling fleetingly only on items or ideas which will modify the original understanding. Context and understanding go hand in hand making a fluent reader. Without this original perception of the context of a passage the reader will stick at certain points, have to go back over words, and lose the general thread of what he has been reading. It would seem that pre-questions do help to make the child read more effectively since he is prepared for what is to come. However, we would also hope that they have helped to eliminate the problem of the child who may have learnt to read fluently but who can be led astray by his own expectations of what is to come. His very fluency which Huey is advocating may be a handicap. He may be so sure of what to expect that he will understand incorrectly and miss out certain pointers in the text which/-

[1] 1968 p28.

/which will guide him from his own ideas to the details that the writer wants him to perceive. He must be prepared to concentrate for a moment for example on negatives, on exceptions, on exact time factors and not allow his eye to travel over such items without taking note of them. It was Thorndike[1.] who first highlighted this problem and though his work has often been disputed nonetheless it is a fact that children will often miss linguistic directives. Pre-questions and pre-discussion would appear to be able to prepare the children to look for such factors arising in the passage.

It would appear then that when we ask children questions on a passage we are looking to see first of all if they can answer these specific questions but far more important is whether they have understood the total situation of the passage. Although I haven't, in this study, made a detailed analysis of the type of question asked after the passage was set, I have attempted in the pre-questions to stimulate as great a variety of responses as possible. I have attempted in other words to broaden the basis of response as far as possible before the passage is read and it would appear from the results that this broader basis does make it easier for the child to understand more accurately. The pre-questions have formed a background which has helped the pupils on two levels. The level of literal understanding as referred to in the chapter entitled "The Problem" is very much a case of getting the context right, that is of knowing what is being talked about and therefore knowing what the meaning is of the words used in the passage. The/-

1. Ibid P.47.

The pre-questions would also appear to have helped the child to appreciate not only at the level of understanding but also the deeper implications of the situation; in other words, the level referred to as Comprehension, previously discussed. This form of external stimulation has helped the child to understand a passage to an extent which he had not reached when reading the passage on his own. It would appear then that help from a teacher who is obviously trained to help pupils in these situations and help from his peers will improve the pupil's understanding.

The implications of this are very wide. In the case where pre-questions are used the child is helped to understand through the agency of his teacher. He does for the child what the child could not do on his own, but clearly there are some children, as borne out by the earlier tests, who do not need the help of the teacher. They already understand the passage both at the level of understanding and comprehension. In other words, some children comprehend with ease, but clearly some don't. Also pre-questions are a help in the case of individual passages but the question arises whether this work done by pre-questions in a single passage can be transposed to several passages. Can the pupil be trained to think about content before he comes to any passage? To answer this, several other points must be considered. Will a child who has a broader general knowledge understand passages more easily because he already has more contexts to call upon? Does social background make a difference to understanding because certain knowledge, certain interests, certain attitudes are attached to one social group and not to another? Since/-

Since literacy has been at the command of the middle classes for a longer spell of time than for most people is it likely that most writing is done for the middle classes by the middle classes? The answer to most of these questions depends on sociological research but the significance of the questions is still relevant since some children very clearly have a much better general knowledge than others and this helps them interpret and understand what they read.

What we must look for then is some way of improving every child's ability to understand single passages but more important his ability to understand writing of every kind. The pre-questions would suggest that help is possible but it would appear to be of a limited nature, that is limited to one extract at a time. It might be possible to grade passages on particular topics using pre-questions to carry through a whole course of study. However, much further research would need to be done before we could say whether this would be effective either in the short term - although this would seem more likely - or in the long term by training them to study in this way for themselves.

It does not seem likely that a child could think in this way (always to be alert to potential contexts) unless he had a great deal more knowledge. Therefore it would seem better to tackle the problem from a different direction - that is how to improve his general knowledge. It might be possible to prepare courses of background knowledge to help pupils who are not responding well to typical passage-question tests. Such/-

/Such a course wouldhelp them recognise the context of a passage and the issues raised in it with the same ease as their peers who are possibly no more intelligent but who have a wider background of information and discussion to draw upon. The exact nature of such a course is open to great speculation. Huey[1.] again has already raised this possibility when he quotes from Hall's "Adolescence".[2.] Hall expresses the value of the reading Anglo-Saxon Literature in translation as follows:-

"It stirs those subtle perceptions, where deep truths sleep in the youthful soul before they come to real consciousness". But he also comments on the breadth and knowledge of the Anglo-Saxon writers in general and suggests the tremendous understanding needed to appreciate them fully. To help the children understand Anglo-Saxon literature, Hall suggests the following:-

"Excrescences must be eliminated, the gold recoined, its culture power brought out, till, if the ideal were fully realised, the teacher would almost become a bard of these heroic tales, with a mind saturated with all the available literature, pictures, and even music bearing on it, requiring written and oral reproduction from the pupils to see what sinks deepest. Some would measure the progress of culture by the work of re-interpreting on even higher planes the mythic tradition of a race, and how this is done for youth is a good measure of pedagogic progress".

In other words what Hall and Huey are seeing as the ideal means of understanding is the saturation of the mind in all the knowledge available about a given subject.

1. Ibid (377) p.28

2. C. S. Hall, "Adolescence", Vol. 2, D. Appleton & Co., 1904.

Huey[1] also describes the preparation of the German "Das Deutsche Lesebuch" - a kind of encyclopaedia of traditional German literature.

"Many men for years went over the history of German Literature, from the Eddas and the Nibelungenlied down, including a few living writers, carefully selecting saga, legends, Marchen, fables, proverbs, hymns, a few prayers, Bible tales, conundrums, jests and humorous tales, with many digests, epitomes, and condensations of great standards, quotations, epics, lyrics and dramatic poetry, adventure exploration, biography with sketches of life of each writer quoted, with a large final volume of German literature".

Huey saw this as an ideal preparation for further reading and he advocated the same for Anglo-Saxon literature. In a sense the teacher would become a walking encyclopaedia of much of the back-ground, traditions, legends, myths which are important in our understanding of much that has been written in the past but also relevant to a great deal of modern literature, particularly children's writing. This, together with a good working knowledge of what is written for children at their different stages of development is something that the teacher must pass on to the pupils.

With this knowledge contents would become clear. When he was reading a child would merely be building on to a vast store of knowledge he already possessed and therefore his ability to read effectively and fluently would be so much increased. "Once children know a story, it is surprising how quickly they can locate its parts on the printed page and read it", writes Huey/-

1. Ibid. (p. 378) P.28

/Huey[1]. and the results of my tests would seem to bear this out. He also argues that the ear is more important than the eye and that the ear is the gateway to the child - soul, if not indeed to the man-soul. Consequently Huey places great importance on listening, on a good speech environment and the use of children's written work in the teaching of reading. He even goes as far as to suggest that the mind can be confused with too much reading unless the mind is properly prepared and organised for the task. He emphasises that reading must always be relevant to a particular purpose or need and never for its own sake - the purpose of any reading must always be clear. These purposes may vary from reading for a p oint of information to reading "in which the author's values are felt, and felt in a perspective of values in which we actively and sympathetically follow the ins and outs of his intentions and selections and associations, and feel his cautions, his fidelity to truth, his accuracy and method - such reading cannot but train the mind to modes of functioning that are similar to his".[2]

In the earlier stages the teacher will obviously have to impart much of this knowledge and have to use it to form pre-questions which would stimulate the child in particular instances but the ideal situation would only be achieved when the pupil was able to establish context at every level for himself. He would as it were form the pre-questions so rapidly in his mind as he started to read the passage that he would not need external prompting.

1. Ibid (p. 346) P.28

2. Ibid (p. 365) P.28

Obviously there are many ways of encouraging a pupil to achieve this kind of knowledge by the use of library lists and work, general information, and by setting a wide range of activities in reading. The greatest amount of encouragement should be given to reading by developing discussion, writing/reviewing what's read, so that children's awareness of what is read and about to be read is extended.

This would help the reader and is linked to one of Huey's comments: "If the mind really keeps exercising itself and feeding on what may be found worth using, it may deal safely with any quantity of material".

Both the pre-questions and the post questions help the reader to establish a context and in doing so assist the reader's perception. Consequently what does seem to be important is the kind of question we ask. One general application of the work of Spearritt,[1] Thorndike[2] and D. D'Arcy[3] is that it is not necessary to ask a series of questions which covers all the areas contained in the Barrett[4] taxonomy. It would in fact in some cases be better to ask those questions which cover or highlight those areas in the passage which reflect the writer's purpose or purposes.

More work could be done in the future on the kind of pre-questions which might be set on a complete book. These/-

1. Ibid P.11

2. Ibid P.47

3. Ibid P.43

4. Ibid P.7

These would be obviously intended to help the pupil to understand the issues in the book to encourage him to read a book which he might not otherwise pick up or be willing to read past the first few pages. This also bears on the problem of why pupils come willingly to some books and fail to read other books which their teacher often feel are more stimulating and of greater educational value. It would be an interesting study to attempt to analyse what qualities make a book appeal to children and what qualities repel them from a book.

A P P E N D I X

TEST TWO

THE ROSSMORE MEN

The wind drove us right in to the quay. One or two of the Rossmore men were loading their boats with turf, and they helped us to tie up to the quay. They did this silently, with hardly any talk, because at that time there was no love lost between the islanders and the mainlanders. There was an old, old story behind this. But though the people's blood boiled whenever they thought of it, I always thought the real reason was that we had to buy our turf from the mainlanders, because there is no turf on the islands. Naturally enough, we hated seeing our good money going up the chimney in smoke.

As time went on, many other reasons for the feud grew out of the first one. We laughed at the turf-boat men for having no land. "Badoirs" we called them, which simply means a boatman. But you should hear the way that an Inishrone man can say that simple word before you could realise its deadly insult. In return, the mainlanders' most villainous insult to us was in the two words: "Cosa Bo", which means "Cows' feet". This referred to the wonderful shoes, made of raw-hide with the hair on, that all the islandmen wore. If we tried to go about our daily business in leather boots, our island would be inhabited by lame men in a very short time. Our rawhide shoes are the only thing for the rocks, and they have the great advantage that they put no money into the shopkeepers' pockets.

So we gave the badoirs no more than a single, curt word of thanks for their help, and led the colt ashore. He caused as much of a sensation as if we had casually brought an elephant with us. It/-

It was only then, as we walked him up the quay, that I realised what a wonderful animal he was. The boatmen stared after him as if they had never seen his like in their lives. Neither John nor Bartley Conroy would look back, but I did. There they were, grouped together with their mouths open, and their faces full of an admiration and delight that they could not conceal.

Instead of pleasing me, the sight of them gave me my first feeling of real fear of the result of our trip to the Island of Horses. I turned back slowly and followed the Conroys up to Stephen Costelloe's house.

"THE ISLAND OF HORSES"

pp. 80 - 81.

TEXT TWO

'MIKE COFFEY'

Apart from his tale-bearing habits, we had our own reasons for disliking Mike Coffey. He was a frequent visitor to Inishmone. He had a big black hooker of about twenty tons, fitted out below decks like a travelling shop, with groceries, and flour and meal, and bales of cloth, and little bits of hardware and harness. He and his son Andy sailed from island to island all along the coast, from Kerry to Donegal. Andy was a long, red-haired drink of water, who never spoke above a whisper in his father's presence, though he was more than old enough to be a father himself. Mike was shorter and fatter, with greasy grey hair in little curls like a horny ram. He was never seen without a very flat black cap and a wide black-gummy smile, that showed all his broken teeth. They had no real friends on any of the islands, as I had heard, but they had a way of walking into the kitchen as if they never doubted their welcome. The people were too polite to discourage them.

Mike would sit in the most comfortable chair - he liked a rocking-chair best. He always sat with his back to the light, so that no-one could see his face too clearly. When Mike was settled, Andy would give a little high, apologetic giggle, like a minnum goat. Then he would sneak in to the hob and start warming his miserable shins at the fire. Before she would know it, the woman of the house would be making tea and cutting up soda-cake for the pair of them. They always slept on the hooker at night. It was tied up to the quay at this moment, in the choicest place by the steps, of course. There/-

There was no sign of the Coffeys. Pat said he thought that they were up along the island somewhere, selling tea.

"ISLAND OF HORSES"

pp. 13 - 14

TEST 2. 'Mike Coffey' passage and 'The Rossmore Men' together with pre-questions and set questions on both.

The Rossmore Men

Pre-Questions

1. What sort of things are most likely to cause trouble between different groups of people?

2. What do you need to take into account in choosing footwear when walking in mountainous country?

3. What kind of property arouses most respect in other people?

4. Why is praise from an enemy considered greater than praise from a friend?

Questions on the Passage

1. What does the boy think is the cause of the feud between the islanders and the Rossmore men:

   (a) because of a crime committed in the past?

   (b) the islanders had to pay money for the fuel?

   (c) because they wanted to fish in the same waters?

2. The islanders despised the mainlanders:

   (a) because they dug turf?

   (b) because they were fishermen?

   (c) because they had no land?

3. What effect would wearing normal boots have on the islanders:

   (a) they would become lame?

   (b) the boots would quickly wear out?

   (c) the islanders would look ridiculous?

4./-

4. What made the boy realise the horse was wonderful:

(a) because he was a good judge of horse?

(b) because his friends believed it?

(c) because even his enemies showed admiration for the horse?

Mike Coffey

Pre-questions

1. What kinds of business men would be likely to visit the remote islands frequently?

2. If you always seem to be whispering in someone's presence, what does it suggest about your attitude to that person?

3. If someone came to your house for the first time, how would you expect them to behave?

4. Why can visitors in your house get away with things that you wouldn't be allowed to do?

Questions on the Passage

1. What does Mike Coffey do for a living?

(a) a fisherman;

(b) a travelling salesman;

(c) a tourist guide.

2. What is Andy's attitude to his father?

(a) love; (b) fear; (c) indifference.

3. Which of Mike Coffey's qualities do the islanders most dislike?

(a) his tale boasting; (b) his ugliness;

(c) his way of pushing into houses.

4. What is it in other people that the Coffeys depend on for their success?

(a) kindness; (b) hospitality; (c) politeness.

Supplementary Answers and Questions (Test 3)

The Rossmore Men

How do you know from the passage that the Rossmore Men and the Islanders did not get on? (We are told they didn't speak to each other).

What suggests to you that the storyteller is the youngest of the Islanders? (The detail mentioned that he looked back).

Why do you think the boy felt fear at the admiration shown for the colt? (That the colt would raise envy).

Mike Coffey

What was unattractive about the appearance of Mike? (His grizzly grey hair and his broken teeth).

Why did he sit with his back away to the light? (So that his face was turned away).

What does the fact that they got the best place on the quayside suggest about the characters of the Coffeys? (Selfish, clever).

CHAPTER THREE

ISLAND OF PINK DOLPHINS

Night was coming and I left the cave, going along the foot of the hill that led to the cliff. I had not gone far on this trail that the wild dogs used when I saw the broken shaft of an arrow. It had been gnawed off near the tip and I knew it was from the arrow which had wounded the leader.

Farther on I saw his tracks in the dust. They were uneven as if he were travelling slowly. I followed them towards the cliff, but finally lost them in the darkness.

The next day and the next it rained and I did not go to look for him. I spent those days making more arrows, and on the third day, with these arrows and my spear, I went out along the trail the wild dogs had made to and from my house.

There were no tracks after the rain, but I followed the trail to the pile of rocks where I had seen them before. On the far side of the rocks I found the big grey dog. He had the broken arrow in his chest and he was lying with one of his legs under him.

He was about ten paces from me so I could see him clearly. I was sure he was dead, but I lifted the spear and took good aim at him. Just as I was about to throw the spear, he raised his head a little from the earth and then let it drop.

This surprised me greatly and I stood there for a while not knowing what to do, whether to use the spear or my bow. I was used to animals playing dead until they suddenly turned on you or ran away.

The/-

The spear was the better of the two weapons at this distance, but I could not use it as well as the other, so I climbed on to the rocks where I could see him if he ran. I placed my feet carefully. I had a second arrow ready should I need it. I fitted an arrow and pulled back the string, aiming at his head.

Why I did not send the arrow I cannot say. I stood on the rock with the bow pulled back and my hand would not let it go. The big dog lay there and did not move and this may be the reason. If he had got up I would have killed him. I stood there for a long time looking down at him and then I climbed off the rocks.

He did not move when I went up to him, nor could I see him breathing until I was very close. The head of the arrow was in his chest and the broken shaft was covered with blood. The thick fur around his neck was matted from the rain.

I do not think that he knew I was picking him up, for his body was limp, as if he were dead. He was very heavy and the only way I could lift him was by kneeling and putting his legs around my shoulders.

In this manner, stopping to rest when I was tired, I carried him to the headland.

I could not get through the opening under the fence, so I cut the bindings and lifted out two of the whale ribs and then took him into the house. He did not look at me or raise his head when I laid him on the floor, but his mouth was open and he was breathing.

The arrow had a small point, which was fortunate, and came out easily though it had gone deep. He did not move while I did this, nor afterwards as I cleaned the wound with a peeled stick from a coral bush. This bush has poisonous berries, yet its wood often heals wounds that nothing else will.

I/-

I had not gathered food for many days and the baskets were empty, so I left water for the dog, and, after mending the fence, went down to the sea. I had no thought that he would live and I did not care.

All day I was among the rocks gathering shellfish and only once did I think of the wounded dog, my enemy, lying there in the house, and then to wonder why I had not killed him.

He was still alive when I got back, though he had not moved from the place where I had left him. Again I cleaned the wound with a coral twig. I then lifted his head and put water in his mouth, which he swallowed. This was the first time that he had looked at me since the time I had found him on the trail. His eyes were sunken and they looked out at me from far back in his head.

Before I went to sleep I gave him more water. In the morning I left food for him when I went down to the sea, and when I came home he had eaten it. He was lying in the corner, watching me. While I made a fire and cooked my supper, he watched me. His yellow eyes followed me wherever I moved.

That night I slept on the rock, for I was afraid of him, and at dawn as I went out I left the hole under the fence open so he could go. But he was there when I got back, lying in the sun with his head on his paws. I had speared two fish, which I cooked for my supper. Since he was very thin, I gave him one of them, and after he had eaten it he came over and lay down by the fire, watching me with his yellow eyes that were very narrow and slanted up at the corners.

Four nights I slept on the rock, and every morning I left the hole under the fence open so he could leave. Each day I speared a fish for him and when I got home he was always at the fence waiting for it. He would not take the fish from me so I had to put it on the ground. Once I held out my hand to him, but at this he looked away and showed his teeth.

On the fourth day when I came back from the rocks early he was not there at the fence waiting. A strange feeling came over me. Always before when I returned, I had hoped he would be gone. But now as I crawled under the fence I did not feel the same.

I called out, 'Dog, Dog', for I had no other name for him.

I ran towards the house, calling it. He was inside. He was just getting to his feet, stretching himself and yawning. He looked first at the fish I carried and then at me and moved his tail.

That night I stayed in the house. Before I fell asleep I thought of a name for him, for I could not call him Dog. The name I thought of was Ramtu, which means in our language Fox Eyes.

"THE ISLAND OF THE BLUE DOLPHINS"

Scott O'Dell, pp. 80 - 84.

MOST TIMES

Pre-Questions

1. Why do people keep animals? Give three reasons.

2. If you were to find a large wounded animal, what would you do about it? What reasons would you have for your actions?

3. What sort of things do hunters take into account when following the trail of wild animals?

4. What skills do you think you would need to learn if you were to live alone on a desert island?

5. What are the dangers of keeping larger pets? e.g. Alsatians.

6. In what ways do animals and humans communicate with each other?

7. How do you go about choosing a name for a pet?

Questions on the Passage

1. How does the girl know she's on the trail of the dog?

2. How does she know that the leader is badly wounded?

3. How do you know that the wild dogs have often come to her home?

4. What sort of weather is unsuitable for following a trail?

5. What choice of weapons does the girl have and why does she choose the bow and the arrow?

6. How do we know that the girl was ready to fire the bow and the arrow?

7. What suggests that the dog is almost dead?

8. "Why I did not send the arrow I cannot say". What reasons can you give for the girl's decision?

9. What do you learn about native medicine from the passage?

10./-

10. What is the girl's attitude to the dog immediately after she has tended its wounds?

(a) affectionate; (b) hostile; (c) indifferent; (d) protective?

11. Why does she give the dog one of the fish she's caught?

12. What suggests that the dog is beginning to get interested in the girl?

13. What is strange about the dog's appearance?

14. What is strange about the appearance of the dog's eyes?

15. What suggests that the girl would be quite happy if the dog went away?

16. Why did the girl feel strange when the dog appeared to be missing on the fourth day?

17. "That night I slept in the house". Why does the girl feel it is important to tell us this?

18. What is the first sign of affection on the part of the dog?

19. Why has the girl just called the dog "Dog" up to this point?

20. What suggests contentment on the part of the dog when the girl returns from fishing?

21. What does the name "Fox Eyes" suggest about the girl's feelings towards the animal?

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